UDK 630* 907 + 585 (001)
https://doi.org/10.31298/sl.143.7-8.2

Izvorni znanstveni članci – Original scientific papers
Šumarski list, 7–8 (2019): 307–318

NATURE CONSERVATION VERSUS FORESTRY ACTIVITIES IN PROTECTED AREAS: THE STAKEHOLDERS' POINT OF VIEW

OČUVANJE PRIRODE NAPREMA ŠUMARSKIM AKTIVNOSTIMA U ZAŠTIĆENIM PODRUČJIMA: MIŠLJENJE STRUČNJAKA

Alessandro PALETTO[1], Tomislav LAKTIĆ[2], Stjepan POSAVEC[3], Zuzana DOBŠINSKÁ[4], Bruno MARIĆ[5], Ilija ĐORDJEVIĆ[6], Pande TRAJKOV[7], Emil KITCHOUKOV[8] and Špela PEZDEVŠEK MALOVRH[9]

ABSTRACT

Implementation of nature conservation policy follows two main approaches: the segregation approach based on the spatially separation of protected areas from productive areas, and the integration approach based on the integration of productive and conservation purposes. In many cases, the implementation of nature conservation policy has increased conflicts due to different and competing land use principles, interests, and point of views.

The aim of this study is to analyse the stakeholders' opinions towards possible conflicts, opportunities and obstacles for human activities, and constraints on forest management related to establishment of a new protected area. The study was structured in three main steps: stakeholder analysis, questionnaire survey, and statistical analysis of the collected data. A semi-structured questionnaire was administered by email to a sample of stakeholders in each county involved in the COST Targeted Network TN1401 "CAPABAL" (41 stakeholders in 10 countries). The data were statistically processed to highlight differences between EU28 member countries and non-EU28 countries, and among groups of interest (public administrations, actors of forest-wood chain, universities and research institutes, environmental Non-Governmental Organizations).

The results show that the most common type of conflict is that related to the procedure for the establishment of a new protected area with special regard to property rights restrictions and additional bureaucracy. In addition, the results show that the most important opportunity is for the rural development of the marginal areas with special regard to the eco-tourism development, while the most important obstacle is the decrease of forest management practices (loggings) due to the nature conservation constrains.

The stakeholders' point of view is a fundamental starting point to reduce conflicts between nature conservation and human activities and to increase the social acceptance of the nature conservation policy.

KEY WORDS: protected areas; Natura 2000 network; participatory process; conflicts; consultation; questionnaire survey

[1] Dr. sc. Alessandro Paletto, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, Research Centre for Forestry and Wood (CREA), Trento (Italy), e-mail: alessandro.paletto@crea.gov.it

[2] Dipl. ing. šum. Tomislav Laktić, Ministry of the Environment and Spatial Planning, Water and Investments Directorate, Cohesion Policy Division, Ljubljana (Slovenia), e-mail: tomislav.laktic@gov.si

[3] Izv. prof. dr. sc. Stjepan Posavec, University of Zagreb, Faculty of Forestry, Department of Forest Inventory and Management (Croatia), e-mail: sposavec@sumfak.hr

[4] Dr. sc. Zuzana Dobšinská, Technical University, Faculty of Forestry, Department of Economics and Management, Zvolen (Slovakia), e-mail: zuzana.dobsinska@tuzvo.sk

[5] Dipl. ing. šum. Bruno Marić, University of Sarajevo, Faculty of Forestry, Sarajevo (Bosnia and Herzegovina), e-mail: b.maric@sfsa.ba

[6] Dr. sc. Ilija Đorđević, Institute of Forestry, Department of Spatial regulation, GIS and Forest Policy, Beograd (Serbia), e-mail: ilija.djordevic@forest.org.rs

[7] Prof. dr. sc. Pande Trajkov, Ss. Cyril and Methodius University in Skopje, Faculty of Forestry, Department of Forest Management, Skopje (North of Macedonia), e-mail: ptrajkov@sf.ukim.edu.mk

[8] Izv. prof. dr. sc. Emil Kitchoukov, University of Forestry, Faculty of business management, Department of Marketing and Production Management, Sofia (Bulgaria), e-mail: ekitchoukov@yahoo.com

[9] Izv. prof. dr. sc. Špela Pezdevšek Malovrh, University of Ljubljana, Biotechnical Faculty, Department of Forestry and Renewable Forest Resources, Ljubljana (Slovenia), e-mail: spela.pezdevsek.malovrh@bf.uni-lj.si

INTRODUCTION
UVOD

In the last decades – after the adoption of the United Nations Convention on Biological Diversity (1992) and the increased number of protected areas worldwide – the implementation of nature conservation policy has become one of the main challenges for scientists and policy makers (Grodzińska-Jurczak, Cent 2011). The implementation of nature conservation policy can follow two main approaches (Kraus, Krumm 2013; Schultz et al. 2014): the first approach (segregation approach) is based on the spatially explicit separation of protected areas from productive areas (e.g., agricultural fields, productive forests), while the second approach (integration approach) emphasizes the integration of productive and conservation purposes. Historically, the management of first protected areas in Europe followed the principles of segregation approach in order to protect habitats and species within these areas characterized by a high biodiversity value. Conversely, the implementation of Natura 2000 network in the European Union (EU) member countries followed the principles of integration approach (Jones et al. 2015). The integration approach adopted by EU considers combining human activities (e.g., recreational activities, agricultural and forestry practices) and nature conservation purposes in the same area or at least in close proximity to each other (Stoll-Kleemann 2001). One of the pillars of the integration approach is the protection of natural resources and ecosystems including inhabitants' wellbeing and better quality of live (Pietrzyk-Kaszyńska et al. 2012).

However, in many cases, the implementation of nature conservation policy – e.g., the establishment of a new protected area or Natura 2000 site – has increased conflicts due to different and competing land use principles, interests, and point of views (Young et al. 2007; Ferranti et al. 2010; Winkel et al. 2015). In many EU member countries, the designation of Natura 2000 sites related to the implementation of EU Directive 92/43/EEC (Habitats Directive) has encountered a strong opposition from stakeholders and citizens (Stoll-Kleemann 2001; Brescancin et al. 2017). Sometimes, the reasons of the conflicts are due a low – or absent – level of information and involvement of stakeholders and local communities in the decision-making process (e.g., implementation process and management of protected site). According to Weiss et al. (2017) the main categories of nature conservation conflicts are: ideological and knowledge-based, interest-related, and institutional challenges. The ideological and knowledge-based challenges include conflicts between nature conservation and the economic use of nature resources due to a different value and belief system and a lack of good knowledge. This category of conflicts is mainly related to a difficulty in understanding the specific conservation approach and objectives of nature conservation policy. The interest-related challenges are related to the distribution of costs and benefits of nature conservation measures. Generally, the costs are borne by the local community (e.g., costs for lost revenues, restriction in the decision-making freedom of landowners, lack of funding for the compensation of costs), while the benefits are enjoyed by the global community. The institutional challenges include the formal rules and procedures, distribution of political authority, administrative responsibilities and cross-sectoral coordination. The issue of inclusiveness of stakeholders and local community in the implementation process is the major institutional challenges for the authorities (Blicharska et al. 2016).

Several authors highlighted that public participation in environmental governance and for the establishment of new protected areas is a good way to lead to a more effective and legitimate policy in the eyes of society (Dimitrakopoulos et al. 2010, Blondet et al. 2017). A transparent and inclusive participatory process could avoid conflicts between stakeholders with different interests, increase the social acceptance of decisions (Rauschmayer et al. 2009), enhance the legitimacy of policy outcomes and increase the quality of decision-making and facilitate implementation (Engelen et al. 2008). Therefore, a key point in the participatory process is to know the stakeholders' opinions and expectations about nature conservation issues and the relationship between conservation measures and human activities (i.e. forest management practices, hunting, recreational opportunities). The point of views of stakeholders is the results of their future expectations and experiences related to participatory process in environmental governance (De Meo et al. 2016).

Starting from these considerations, the aim of this study is to analyse the stakeholders' opinions about three main aspects related to the nature conservation issues. The aspects considered in the survey are: (1) possible conflicts in and near protected areas (Natura 2000 sites and other protected areas); (2) opportunities and obstacles for human activities in and near protected areas; (3) possible constraints on forest management related to establishment of a new protected area such as Natura 2000 site or other protected area. The study was implemented in the European countries involved in COST Targeted Network TN1401 "Capacity Building in Forest Policy and Governance in Western Balkan Region (CAPABAL)". The main objective of COST Action "CAPABAL" is to enhance the forest and natural resources policy and governance, as well as the sustainable, multifunctional forest management in the Western Balkans.

MATERIAL AND METHODS
MATERIJALI I METODE RADA

The study was structured in three steps in order to collect and analyse the stakeholders' opinions towards nature con-

servation issues in Europe: 1) stakeholder analysis (February-April 2018); 2) preparation and administration of the semi-structured questionnaire (April-July 2018); and 3) statistical analysis of the collected data (August-September 2018).

The survey was implemented in 10 European countries: six EU28 member countries (Bulgaria, Croatia, Czech Republic, Italy, Slovakia and Slovenia) and four non-EU28 member countries (Bosnia and Herzegovina, North of Macedonia, Montenegro and Serbia). The countries involved in the survey were identified based on the official list of participants to the COST Action "CAPABAL" balancing the number of respondents of the EU and non-EU countries. According to Gaston et al. (2008), the total protected areas of the six EU28 member countries involved in the survey is around 70,000 km^2 with a range of protected area on total area (%) from more than 21% in Slovakia and around 9% in Bulgaria. The protected area of the four non-EU28 member countries is around 8,000 km^2 with a range of protected area on total area (%) between less than 1% in Bosnia and Herzegovina and more than 25% in Montenegro (Gaston et al. 2008). In the EU28 member countries, the Natura 2000 sites – Special Protection Areas (SPAs) for the conservation of birds as established by Directive 2009/147/EC and their habitats and Special Areas of Conservation (SACs) targeting the protection of rare and threatened species as established by Council Directive 92/43/EEC – have a key importance considering that approximately 37.5 million ha of forests are included in the Natura 2000 network in the EU28 (Marchetti et al. 2017). The Natura 2000 network area represents more than 20% of the total forest area in the EU28 and around 50% of Natura 2000 total area (EEA 2016).

In the first step of this study, the researchers involved in the COST Action Targeted Network TN1401 "CAPABAL" have implemented a stakeholder analysis in order to identify 2 to 7 key stakeholders in each country. The stakeholder analysis can be defined as an interactive process to define aspects of a social phenomenon affected by a decision (Mitchell et al. 1997, Grilli et al. 2015). The aim of the stakeholder analysis is to identify individuals and groups who are affected by or can affect parts of this phenomenon and prioritizes these individuals and groups in respect to their involvement in the decision-making process (Reed et al. 2008). The categories of stakeholders to involve in the survey (i.e. individuals and/or collective actors) and the variables used to identify the stakeholders are the key aspects in the stakeholder analysis (Grilli et al. 2015). In the present study, we focused only on the collective actors with special regard on these four groups of interest: public administration at national and local levels (e.g., Ministries, regions/departments and other public agencies); actors of forest-wood chain (e.g., public and private forest enterprises, forest owners' associations); universities and research institutes; environmental non-governmental organizations (NGOs). Only one representative for each group of interest in each country was involved in the survey. According to Gallo et al. (2018), the variables used to identify the stakeholders were as follows: 1) expertise in forestry and/or nature conservation, 2) past involvement in the participatory process concerning the implementation of the Natura 2000 network or the establishment of protected areas. However, the preliminary list of stakeholders identified by the researchers involved in the COST Action "CAPABAL" was integrated with a snowball sampling method. The snowball sampling is a non-probability sampling technique used to identify a purposive sample, whereby the researchers ask respondents for other persons to involve in the survey based on their knowledge (Cohen, Arieli 2011; De Meo et al. 2011). In this study, during the questionnaire administration some stakeholders have brought out other institutions or organizations to be included in the survey.

During the second step, the stakeholders' opinions were collected through the administration of a semi-structured questionnaire by email. A first version of the questionnaire was developed and pre-tested face-to-face with two stakeholders in February-March 2018. The final version of the questionnaire was formed by questions divided in four thematic sections. The first thematic section focused on the personal information of the respondents (i.e. country, name of organization, role and years of work in their organization); while in the second thematic section the potential conflicts in protected areas have been investigated. The respondents indicated the importance of 15 conflicts divided in three types of conflicts using a 5-point Likert scale format (from 1=very low importance of the conflict to 5=very high importance of the conflict). The main types of conflicts considered are: (1) conflicts between forestry activities and nature conservation; (2) conflicts between hunting activities and nature conservation; and (3) procedural conflicts related to the establishment of new protected areas. According to the classification proposed by Weiss et al. (2017), the first two types of conflicts of this study are included in the interest-related challenges, while third is included in the ideological and knowledge-based. The first type includes some aspects related to trade-offs between the management of forests for timber and bioenergy production and for biodiversity conservation. The second type considers trade-offs between the management of protected areas for nature conservation and hunting activities. Conversely, the third type of conflicts is in the institutional challenges considering the main aspects related to the procedural process (e.g., identification and mapping of protected area boundaries, stakeholders' involvement in the participatory process, and restrictions to the property rights).

The third thematic section of the questionnaire investigated whether protected areas can be considered as an opportu-

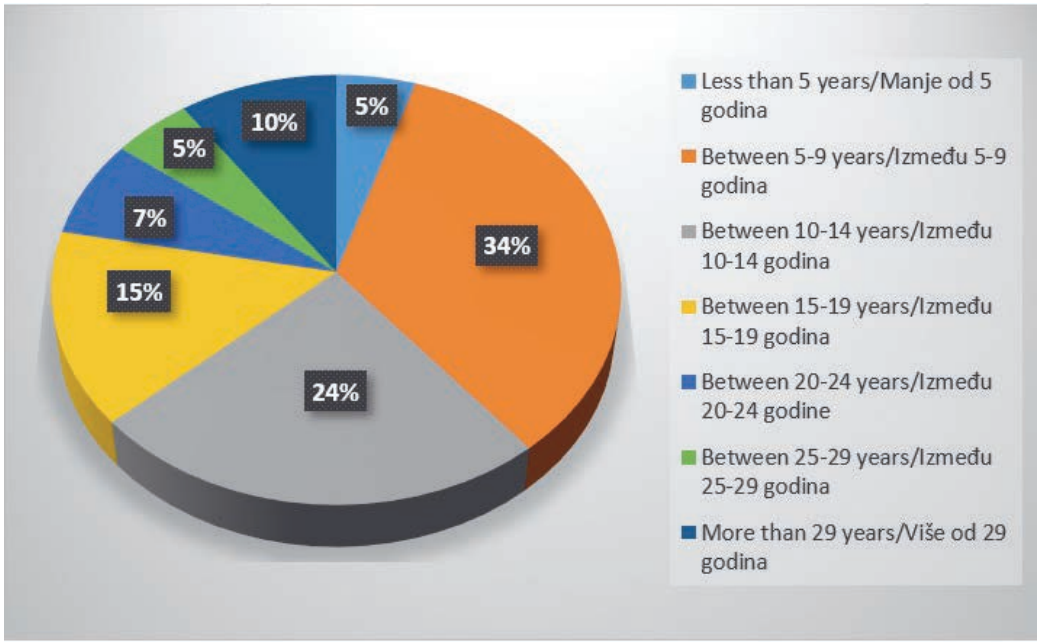

Figure 1. Distribution of sample of stakeholders by expertise year's class
Slika 1: Distribucija uzorka stručnjaka prema godinama radnog iskustva

Table 1. Distribution of respondents by groups of interest.
Tablica 1. Raspodjela ispitanika po interesnim skupinama.

Group of interest/*Zainteresirane strane*		Number of respondents/ *Broj anketiranih*
Public administrations/*Javna administracija*	Ministries of Agriculture and Forestry/*Ministarstva poljoprivrede i šumarstva*	4
	Ministries of Environment/*Ministarstvo okoliša*	2
	Local public authorities (e.g., regions, municipalities, agencies)/ *Lokalna javna Uprava (npr. regionalna, općinska, agencije)*	8
	National Parks/Nacionalni parkovi	3
Actors of forest-wood chain/*Sudionici u lancu šumarstvo-prerada drva*	Public and private forest enterprises/managers/ *Javna i privatna šumarska poduzeća, upravitelji*	6
	Forest owners' associations/ *Udruge privatnih šumovlasnika*	3
Universities and research institutes *Sveučilišta i istraživački instituti*	Forestry universities/Šumarski fakulteti	7
	Forestry research institutes/Šumarski istraživački instituti	5
Non-governmental organizations/*Nevladine udruge*	Environmental NGOs/ *Nevladine okolišne udruge*	3
Total/*Ukupno*		41

nity or an obstacle for human activities using open-ended questions. The last thematic section focused on five possible constrains on forest management after the establishment of the Natura 2000 sites or other protected areas. Respondents indicated possible constrains using a 5-point Likert scale format (from 1=very small change to 5=very big change).

In the third step, the collected data were statistically processed to highlight differences in the stakeholders' opinions distinguishing between EU28 (Bulgaria, Croatia, Czech Republic, Italy, Slovakia and Slovenia) and non-EU28 member countries (Bosnia and Herzegovina, North of Macedonia, Montenegro and Serbia), and groups of interest. The differences between countries were statistically tested using the non-parametric Mann-Whitney U test (a=0.05), while the statistical differences among groups of interest were tested using the non-parametric Kruskal-Wallis test (a=0.05). The data collected with open-ended questions were analysed through a content analysis using keywords and synonyms to identify the main opportunities and obstacles.

RESULTS AND DISCUSSION
REZULTATI I RASPRAVA

At the end of data collection, 41 stakeholders filled out the questionnaire representing 10 European countries: 17.1%

Table 2. Stakeholders' opinions about the importance of conflicts in and near protected areas by group of countries and group of interest (mean and st.dev.)
Tablica 2. Stavovi stručnjaka o važnosti sukoba unutar i uz zaštićena područja podijeljeni prema grupama zemljama i interesima (aritmetička sredina i standardna devijacija)

Conflicts/*Sukobi*	Country/Zemlja		Group of interest/Zainteresirani dionici			
	Non-EU countries *Zemlje izvan EU* (*n*=19)	EU countries *EU zemlje* (*n*=22)	Public administrations *Javna daministracija* (*n*=17)	Universities *Sveučilišta* (*n*=12)	Forest-Wood Chain *Lanac vrijednosti šuma-drvo* (*n*=9)	Environmental NGOs *Okolišne nevladine udruge* (*n*=3)
Conflicts between forestry activities and nature conservation/Sukobi između šumarskih aktivnosti i zaštite prirode						
Extension of the forest rotation period (loggings)/*Povećanje ophodnje (sječa)*	3.38 (*1.31*)	3.00 (*1.59*)	3.33 (*1.35*)	2.90 (*1.52*)	**3.75** (*1.89*)	2.67 (*1.53*)
Amount of deadwood/*Iznos mrtvog drva*	2.50 (*1.21*)	2.67 (*1.24*)	2.67 (*1.18*)	2.44 (*1.01*)	2.57 (*1.62*)	2.67 (*1.53*)
Conflicts between forest management and establishment of protected areas/*Sukobi između gospodarenja šumom i uspostave zaštićenih područja*	2.88 (*0.99*)	2.90 (*1.04*)	2.69 (*0.79*)	3.00 (*1.13*)	3.13 (*1.36*)	3.00 (*0.00*)
No fair compensation for property rights restrictions/*Nepoštena kompenzacija prilikom ograničenja vlasničkih prava*	3.50 (*1.10*)	**3.59** (*1.14*)	3.38 (*0.96*)	3.75 (*1.36*)	3.50 (*1.07*)	**4.00** (*1.41*)
Limitations in the construction of forest roads/*Ograničenja u izgradnji šumskih cesta*	3.05 (*1.08*)	3.37 (*1.26*)	**3.67** (*0.98*)	3.00 (*1.13*)	2.78 (*1.48*)	3.00 (*0.00*)
Establishment of forest reserves/*Uspostava šumskih rezervata*	2.69 (*1.45*)	3.00 (*1.60*)	2.82 (*1.40*)	2.75 (*1.58*)	2.67 (*1.86*)	3.33 (*1.53*)
Karst pastures/*Ispaša na kršu*	2.71 (*1.27*)	2.92 (*1.19*)	2.75 (*1.22*)	3.11 (*1.27*)	2.67 (1.15)	2.33 (*1.53*)
Conflicts between hunting activities and nature conservation/Sukobi između lovnih aktivnosti i zaštite prirode						
Limitations in hunting activities (zones and period)/*Ograničenje lovnih aktivnosti (po zonama i vremenski)*	**3.84** (*1.01*)	2.64 (*1.08*)	3.29 (*1.33*)	3.20 (*1.03*)	3.29 (*1.25*)	**4.50** (*0.71*)
Replacement of hunting facilities/*Izmještanje lovnih objekata*	3.00 (*1.21*)	2.36 (*1.34*)	2.62 (*1.12*)	2.56 (*1.42*)	2.80 (*1.30*)	3.33 (*2.08*)
Procedural conflicts related to the establishment of protected areas/Proceduralni sukobi vezano uz uspostavu zaštićenih područja						
Conflicts in the definition, identification and mapping of Natura 2000 sites/protected areas/*Sukobi prilikom definiranja, identifikacije i kartiranja Natura2000 staništa i zaštićenih područja*	3.21 (*1.03*)	3.32 (*1.34*)	2.94 (*1.14*)	**3.90** (*0.88*)	3.13 (*1.46*)	3.33 (*1.15*)
Lack in communication between public authorities and citizens about requirements and measures in protected areas/*Nedostatak komunikacije između javnih ustanova i građana oko zahtjeva i mjera u zaštićenim područjima*	3.44 (*1.20*)	3.55 (*0.89*)	3.29 (*1.10*)	3.82 (*0.87*)	**3.71** (*1.11*)	3.00 (*1.00*)
Different stakeholders' perception about nature conservation/*Različite percepcije dionika o zaštiti prirode*	**3.67** (0.77)	3.38 (*1.02*)	**3.50** (*0.89*)	3.67 (*0.98*)	**3.75** (*0.71*)	2.33 (*0.58*)
Property rights restrictions/*Ograničenja prava vlasništva*	3.47 (*1.33*)	**3.95** (*1.32*)	**3.56** (*1.21*)	**4.36** (*1.03*)	3.29 (*1.80*)	3.33 (*1.53*)
Additional bureaucracy/*Dodatna administracija*	**3.75** (1.*24*)	**3.57** (*1.36*)	3.33 (*1.45*)	**4.08** (*1.16*)	3.43 (*1.27*)	**4.00** (*1.00*)
Conflicts due to unclear or not fully accepted definition of institutional roles in the management of protected areas/*Sukobi radi nejasne ili nepotpuno prihvaćene definicije insitucionalne uloge u gospodarenju zaštićenih područja*	3.53 (*1.22*)	3.14 (*1.11*)	3.18 (*1.19*)	3.83 (*1.03*)	2.88 (*1.13*)	3.33 (*1.53*)

In bold the three most important conflicts by group of countries and group of interest.

Podcrtana su tri najvažnija sukoba prema grupama zemalja i zainteresiranosti

of respondents are from Serbia; 12.2% from Croatia, Italy, and North of Macedonia respectively; 9.8% from Bosnia and Herzegovina, Slovakia and Slovenia respectively; 7.3% from Montenegro; and the remaining 4.9% from Bulgaria and Czech Republic respectively. Therefore, 22 stakeholders come from EU28 member countries (54% of the sample of stakeholders), while the remaining 19 stakeholders are from non-EU28 countries (46%).

On average, the respondents have 14 years of past expertise in forestry or nature conservation issues with a range from a minimum of 2 years to a maximum of 40 years. The distribution of respondents by expertise year's class shows that the majority of the stakeholders (58% of sample of stakeholders) have a past expertise between 5 and 14 years (Figure 1).

With regard to the distribution of the stakeholders by group of interest (Table 1), the results show that 41.5% of respondents are representatives of public administrations; 29.3% of universities and research institutes; 22.0% are actors of forest-wood chain; and 7.3% are members of environmental NGOs.

Types of conflicts – *Vrste sukoba*

The results show that for the stakeholders involved in the survey the most common type of conflict is those related to the procedure for the establishment of a new protected area with a mean of 3.50 (Table 2). Conversely, the conflicts between forest management activities and nature conservation, and between hunting activities and nature conservation are considered less important with mean values of 3.01 and 3.02 respectively. In the first type of conflict, stakeholders assigned a high level of importance to four specific conflicts: property rights restrictions (mean=3.73); additional bureaucracy for forest management activities (mean=3.65); a different stakeholders' perception about nature conservation issue (mean=3.51), and a lack in communication between public authorities and citizens (mean=3.50). In the other two types of conflicts, the most important conflicts are no fair compensation for property rights restrictions (mean=3.55) and the extension of the forest rotation period (mean=3.19) for forestry activities, and the limitations in hunting zones and period (mean=3.33) for the hunting activities.

In addition, the results show that for the representatives of non-EU28 countries the three most important conflicts are the limitations in hunting activities, the additional bureaucracy, and the different stakeholders' perception about nature conservation issue. Conversely, for the representatives of EU28 member countries the most important conflicts are the additional bureaucracy, and those due to the property rights restriction and no fair compensation for restrictions. The Mann-Whitney U test shows statistically significant differences only for conflicts between hunting activities and nature conservation (p=0.003). These statistical differences are related to the limitations in hunting zones and period (p=0.004).

In summary, the stakeholders from EU and non-EU countries have a similar opinion about the high importance to generate conflicts of the additional burocracy and no fair compensation for property rights restrictions. Conversely, the representatives of the non-EU member countries mostly emphasize the importance of restrictions in hunting activities as a potential conflict compared to the colleagues of EU member countries.

The groups of interest assigned a different order of importance to the conflicts. The most important conflicts for the representative of public administrations is due to the limitations in the construction of forest roads (mean=3.67) followed by property rights restriction (mean=3.56) and a different stakeholders' perception about nature conservation issue (mean=3.50). For the representative of universities and research institutes the most important conflict is due the property rights restrictions (mean=4.36) followed by the additional bureaucracy (mean=4.08) and the conflicts related to the definition, identification and mapping of protected areas (mean=3.90). For the actors of forest-wood chain the main conflicts are due to the extension of the forest rotation period (mean=3.75) and a different stakeholders' perception about nature conservation issue (mean=3.75). Finally, for the representative of environmental NGOs the most important conflict is related to the hunting activities (mean=4.50) followed by additional bureaucracy and no fair compensation for property rights restrictions at the same level of importance (mean=4.0). In addition, it is interesting to highlight that the representatives to the public administration assigned a low importance to all types of conflicts rather than other categories of stakeholders. Probably, this difference is because public administration – Ministries, regions and municipalities – are in many cases the main actor for the establishment of protected areas and implementation process related to the stakeholders' involvement. Conversely, the main stakeholder's involved in the protected areas management changes from country to country: in some countries protected areas are managed by public and private enterprises, in other countries the protected areas are managed by public authorities, while in more rare situations protected areas are managed by environmental NGOs (e.g., some Natura 2000 sites). Supposedly, this lower perception of conflicts by representatives of public administrations is due to an underestimation of the importance of participatory process and the socio-economic consequences related to the establishment of a new protected area. In case it is necessary to comply with national or international obligations (e.g., Natura 2000 network implementation), the socio-economic consequences

lose further importance in the public authorities' policy agenda.

The Kruskal-Wallis non-parametric test show statistically significant differences among groups for the procedural conflicts related to the establishment of protected areas (p=0.002). In particular, the representatives of universities assigned a higher level of importance to almost all conflicts compared to the other three groups of interest.

In accordance with the results of this study, other European studies show that the establishment of a new protected area – i.e. Natura 2000 sites, national/regional parks and natural reserves – is the most important reason of conflict related to nature conservation issue. For example, in France, Pinton et al. (2005) highlighted that the highest level of environmental conflict was reached in 1993 during the identification of local sites to be included in the Natura 2000 network. The conflict reasons are to be found in the fact that the Natura 2000 sites have been identified according to biological criteria without considering economic, social, and legal consequences. In addition, a lack in communication between public authorities and citizens associated with economic and management restrictions have increased the level of conflict.

In Germany, Rauschmayer et al. (2009) emphasized that during the designation of Natura 2000 sites the participatory process (named "fake participation" by stakeholders) generated further conflicts associated with disillusions regarding participation. In other words, a top-down process on the other side disguised as a bottom-up process has been adopted. In this example, the public participation approach adopted in the first steps of the implementation process was the main reason of conflict between stakeholders. Similarly, also for the planning formulation and the definition of management activities in the parks, nature reserves and Natura 2000 sites the participatory process is the key to success as emphasized by many authors in different European countries (Stoll-Kleemann 2001; Dimitrakopoulos et al. 2010; Lovrić et al. 2011; Niedziałkowski et al. 2012; Paletto et al. 2016; Brescancin et al. 2017).

In Italy, during the transposition of the Habitats Directive into national legislation the implementation process was delegated to administrative regions that involved provinces, municipalities and mountain communities. Conversely, the involvement of non-state actors in the Natura 2000 implementation process was limited to the consultation (Ferranti et al. 2010). This different involvement of stakeholders has generated misunderstanding and distrust. In addition, De Meo et al. (2016) highlighted that the main conflicts in the management of Natura 2000 sites in Italy are conflicts due to the restrictive measures to human activities in Natura 2000 sites; conflicts due to the bureaucracy; conflicts due to the absence of complete information and communication about Natura 2000 network implementation. Some Italian stakeholders emphasized that many conflicts arise due to the lack of information and communication between public authorities and other stakeholders (Paletto et al. 2016).

In Slovenia, transposition of the Birds and Habitats Directives into the national legislation evidenced different philosophies and concepts about nature conservation between the Ministry for Environment and Spatial Planning and the Ministry for Agriculture, Forestry and Food (Ferlin et al. 2006). The first one considered more appropriate a segregation between Natura 2000 sites and sustainable forest management, while the second one emphasized the importance of integration within sustainable management. In addition, other conflicts arise due to a non-appropriate recognition of the existing forestry legal and management planning system such as the regional forest management plans (Ferlin et al. 2006). Similarly, Gallo et al. (2018), and Laktić and Pezdevšek Malovrh (2018) emphasized that the main conflict in the Natura 2000 Management Programme (2015–2020) is due to restrictions to human activities imposed by Natura 2000 legislation, resulting in a contrast between public authorities and private stakeholders involved in economic activities.

Also the report dealing with conflicts in the implementation and management of the Natura 2000 network show that the main reasons of conflicts between nature conservation and forestry sector are those related to reduced harvest due to need for increased deadwood; limitation to the period of building of forest roads; limitation to tree species selection/ban on introduction of non-native trees; ban on (clear)cutting; prohibition of drainage/change in water level; prohibition on fertilizer, biocides or use of chalk and clear cutting of non-native tree species/clear cutting for restoration of non-forest habitats (Bouwma et al. 2010).

Opportunities and obstacles for human activities – *Prilike i prepreke za ljudske aktivnosti*

The results show that for 63% of respondents the establishment of protected areas – national/regional parks and Natura 2000 sites – is a potential opportunity for human activities. Conversely, another 63% of respondents consider the establishment of protected areas as an obstacle. About 44% of respondents consider at the same time the establishment of protected areas as an opportunity and an obstacle.

Many stakeholders have indicated more than one opportunity and one obstacle, while some others have not indicated any (Table 3). The results show that the most important opportunity is related to the rural development of the marginal areas with special regard to the eco-tourism development, followed by the improvement of people's well-being and quality of life related to the maintenance and improvement of ecosystem services. Conversely, according to the

Table 3. Opportunities and obstacles for human activities according to the stakeholders' opinions (number of answers)
Tablica 3. Mogućnosti i teškoće za ljudske aktivnosti prema mišljenjima stručnjaka (broj odgovora)

Opportunity *Mogućnosti*	N°	Obstacles *teškoće*	N°
Rural development with special regard to the eco-tourism *Ruralni razvoj s naglaskom na ekoturizam*	10	Decrease of forest management practices (loggings) and of number of employed workers due to the constrains *Smanjenje provedbe gospodarenja šumom (sječa) i smanjenje broja zaposlenih radi toga*	7
Improvement of people's well-being and quality of life related to the maintenance and improvement of ecosystem services *Poboljšanje kvalitete života i blagostanja vezano na održavanje i poboljšanje usluga ekosustava*	4	Restriction of economic activities not adequately compensated *Ograničenje ekonomskih aktivnosti koja nisu adekvatno kompenzirana*	7
Opportunity for the allocation of local products on the market (brand) *Mogućnosti za alokaciju lokalnih proizvoda na tržište (brand)*	2		
Additional income for forest owners due to the financial incentives for non-logging *Dodatni prihod za šumovlasnike vezano na financijske koristi kod odustajanja od sječe*	2	Additional bureaucracy for forest owners without benefits *Dodatna administracija bez koristi za šumovlasnike*	4
Opportunity to implement an integrated approach in nature conservation based on participatory process *Mogućnosti primjene integralnog pristupa u zaštiti prirode baziranog na participativnom procesu*	2	Unclear rights, obligations and roles of institutional actors (potential conflict between forestry institutions and nature conservation institutions) *Nejasna prava, obaveze i uloga institucionalnih aktera (potencijalni sukob između institucija u šumarstvu i institucija zaštite prirode)*	3
Opportunity for planned and permanent forest management *Mogućnosti za planiranje i kontinuirano gospodarenje šumom*	1	Prejudices of people and stakeholders towards protected areas *Predrasude ljudi i dionika prema zaštićenim područjima*	1
Opportunity for social and economic capital networking *Mogućnosti za umrežavanje socijalnog i ekonomskog kapitala*	1	Obstacle to large infrastructure projects *Prepreka za velike infrastrukturne projekte*	1
Opportunity for green economy and to create green jobs *Mogućnosti za zelenu ekonomiju i stvaranje zelenih poslova*	1		
Increased access to EU, national and regional funding *Povećani Pristup EU, nacionalnim i regionalnim fondovima*	1	Restriction in forest management activity both for private and public owners *Ograničenje u aktivnostima gospodarenja šumom za privatne i javne vlasnike*	1
Opportunity to harmonize forestry policy, nature conservation polity and water management policy *Mogućnosti za usklađivanje šumarske politike, politike zaštite prirode i politike gospodarenja vodom*	1		

stakeholders' opinions the most important obstacles are the decrease of forest management practices (loggings) due to the nature conservation constrains and the restrictions of economic activities not adequately compensate.

The results of this study are in line with the results highlighted in Italy and Slovakia with special regard to Natura 2000 network by similar studies (De Meo et al. 2016, Brescancin et al. 2017). De Meo et al. (2016) evidenced for the Italian context that the Natura 2000 network is considered as an obstacle for human activities by 38% of 56 respondents. The main reasons are due to restriction of activities not adequately compensated; bureaucracy to access funding and for authorization process; conservative mentality of the staffs of Natura 2000 sites management offices; inadequate information and poor awareness of stakeholders. At the same time, the Natura 2000 network is also considered as an opportunity (82% of 56 respondents) for the following aspects: enhancement of the green economy; increased access to EU, national and regional funding; environmental innovation linked to the enhancement of ecosystem services provided by Natura 2000 sites; creation of green jobs; preservation and enhancement of traditional human activities.

Brescancin et al. (2016) highlighted that the Natura 2000 network in Slovakia is an obstacle to human activities due to an increase in bureaucracy, in restrictions for the traditional agricultural and forestry activities and in restrictions to ownership rights. Those authors shown that this network is an opportunity for four reasons: it provides economic benefits to private owners; it is a marketing tool to promote eco-tourism; it is an instrument to maintain ecosystem services; and it is a mean to stimulate the active management of grasslands.

Table 4. Stakeholders' opinions about the importance of constrains on forest management by country and group of interest (mean and st.dev.)
Tablica 4. Mišljenja stručnjaka o važnosti problema u gospodarenju šumom prema grupama zemalja i interesima (aritmetička sredina i standardna devijacija)

Constrains on forest management *Ograničenja u gospodarenju šumom*	Country *Zemlja*		Group of interest *Zainteresirani*			
	Non-EU countries Zemlje izvan EU (*n* = 19)	EU countries *EU zemlje* (*n* = 22)	Public administrations *Javna administracija* (*n* = 17)	Universities *Sveučilišta* (*n* = 12)	Forest-Wood Chain *Lanac šumarstvo-drvo* (*n* = 9)	Environmental NGOs *Okolišne nevladine udruge* (*n* = 3)
Decrease in deforestation and forest degradation *Smanjenje krčenja šume i degradacije*	2.82 (*1.17*)	2.59 (*1.46*)	2.42 (*1.16*)	2.86 (*1.68*)	2.71 (*1.50*)	3.50 (*0.71*)
Change in the use of pesticides *Promjene u korištenju pesticida*	**3.18** (*1.40*)	2.67 (*1.33*)	2.25 (*1.29*)	2.89 (*1.27*)	3.83 (*1.33*)	3.50 (*0.71*)
Implementation of nature conservation activities *Primjena aktivnosti zaštite prirode*	2.50 (*1.08*)	**3.50** (*1.06*)	2.79 (*0.97*)	3.30 (*1.34*)	**3.67** (*1.21*)	**4.00** (*0.00*)
Restriction in forest operations *Ograničenja prilikom izvođenja* šumskih radova	2.82 (*1.08*)	3.18 (*1.14*)	2.80 (*0.94*)	**3.40** (*0.97*)	3.33 (*1.51*)	2.50 (*2.12*)
Additional time and money for forest resources monitoring *Dodatno vrijeme i novac za nadzor šumskih resursa*	2.82 (*0.98*)	3.45 (*1.15*)	**3.15** (*0.69*)	3.10 (*1.37*)	3.33 (*1.63*)	**4.00** (*0.00*)

In bold the most important constrains on forest management by country and group of interest.
Podcrtana su tri najvažnija ograničenja prema grupama zemalja i zainteresiranosti.

Constraints on forest management – *Ograničenja u gospodarenju šumom*

The results show that for the stakeholders involved in the survey the two most important constrains on forest management are the additional time and money required for forest resources monitoring with a mean value of 3.23 and the implementation of nature conservation activities in the protected areas with a mean value of 3.19 (Table 4). Conversely, the respondents consider that the other three constrains on forest management have a less significant impact: restrictions in forest operations (mean=3.06), changes in the use of pesticides (mean=2.86) and decrease in deforestation and forest degradation (mean=2.68). For the respondents from EU28 member countries the most important constrains on forest management are the implementation of nature conservation activities in the protected areas, followed by the additional time and money for forest resources monitoring. This result is strictly linked to the recently implementation of Natura 2000 network in the EU28 member countries that has increased monitoring procedure. Conversely, for the respondents of the non-EU28 countries the most important change was in the use of pesticides. The Mann-Whitney U test shows statistically significant differences only for the implementation of conservation activities on protected areas (p=0.027).

Observing the results by group of interest, the results show that for the representatives of public administrations the most important constrains is the additional time and money required for forest resources monitoring. This is because public administrations must monitor the activities carried out in protected areas. For the other three groups of interest the most important constrains were the restriction in forest operations for the representatives of universities and research institutes, the change in the use of pesticides for actors of forest-wood chain, and the implementation of nature conservation activities for the representatives of environmental NGOs. The Kruskal-Wallis test shows no statistically significant differences for the constrains on forest management by groups of interest.

In the international literature, other authors show similar constraints on forest management due to the nature conservation policy. In the Netherland, Sotirov and Storch (2017) show that the main restrictions due the Natura 2000 network are related to the short timber harvesting periods and obligations on forest owners to avoid disturbing nesting birds and to maintain static forest types. Similarly, in Slovakia one of the main constrain is due to the restrictions on timber-oriented forest management and economic burdens related to the implementation of Habitats Directive (Brodrechtova et al. 2016).

With regard to the forest management planning, Krajčič (2006) highlighted that an adequate inclusion of nature conservation into forest management plans would increase their social value. In this context, the key points of success are to be receptive to new knowledge and know-how in the field of nature conservation and to engage a dialogue with new social groups. The Slovenian example – the Natura 2000 Management Programme (2015–2020) – can be considered a best practice concerning the integration approach between nature conservation measures and forest produc-

tion purposes. In addition, the participatory process adopted to involve representatives of public and private sectors (e.g., forestry, agriculture, fisheries and water sector) has increased the level of mutual trust (Gallo et al. 2018; Laktić, Pezdevšek Malovrh 2018).

CONCLUSIONS
ZAKLJUČCI

The present study focused on the stakeholders' opinions about conflicts, opportunities, obstacles and constrains on forest management related to protected areas in 10 European countries. The preliminary results produce an overview of the nature conservation challenges for policy makers. One of the lessons learned is that the social valuation of stakeholders' opinions and needs about the relationship between human activities and nature conservation measures in protected areas is a preliminary aspect to take into account to facilitate the social acceptance of nature conservation policy and the potential restrictions to the economic activities. Both a national level – during the identification and implementation process – and a local level in the management of protected sites, the involvement of stakeholders and local community is a key point to reduce conflicts between groups of interest, to increase the social acceptance of decisions, quality of decision-making and facilitate implementation, to enhance the legitimacy of policy outcomes. A second lesson learned is that the communication and information to the local community is an essential aspect to avoid misunderstandings and a loss of trust in the public authorities. A rationale and appropriate communication plan could reduce perceptual differences between groups of interest about nature conservation issue that is one of the main reasons of conflict. A third lesson learned is related to the effective implementation of integration approach in the management of protected areas in order not to hinder human activities but rather to enhance those activities compatible with nature conservation such as sustainable tourism and eco-innovation related to the forest ecosystem services.

The main advantage of this study is to provide new data concerning stakeholders' opinions about nature conservation issue in Europe distinguishing by country and group of interest. Conversely, the main weakness of the study is that the survey has investigated only some European countries and a low number of stakeholders in each country. However, in survey key stakeholders from nature conservation and forestry sector were involved. In addition, a weakness of the results provided by this study is linked to the heterogeneity of the countries involved in the survey with special regard to the national differences in the legislative framework in the field of nature conservation. Probably, these differences in legal arrangements are the main cause of a different stakeholders' perception of conflicts from country to country.

Finally, the future steps will be to extend the survey to other countries and increase the number of stakeholders involved in order to provide an overview as complete as possible at European level.

ACKNOWLEDGEMENTS
ZAHVALA

The data have been collected within the research activities of the COST Targeted Network TN1401 "Capacity Building in Forest Policy and Governance in Western Balkan Region (CAPABAL)" in the STSM of Tomislav Laktić with the title: "Process of the implementation of the Natura 2000 in selected countries in European Union and recommendations for western Balkan countries". Authors would like to thank to Karlo Beljan who helped us in collecting the data during his STSM with the title: "Analysis of experiences in the implementation of Natura 2000 and possible lessons to share with western Balkan countries". Further, authors also want to thank to other partners of COST Action, especially to Aleksandar Stijović, for their support in the research activities and the stakeholders who filled out the questionnaire and provided useful information and suggestions. Zuzana Dobšinska was supported by the Slovak Research and Development Agency under the contract no APVV-15-0715.

REFERENCES
LITERATURA

- Bouwma, I., Van Apeldoorn, R., Kamphorst, D., 2010: Current practices in solving multiple use issues of Natura 2000 sites: Conflict management strategies and participatory approaches. Alterra, Wageningen, the Netherlands.
- Blicharska, M., Orlikowska, E.H., Roberge, J.M., Grodzinska-Jurczak, M. 2016: Contribution of social science to large scale biodiversity conservation: A review of research about the Natura 2000 network. - Biological Conservation, 199: 110-122.
- Blondet, M., de Koning, J., Borrass, L., Ferranti, F., Geitzenauer, M., Weiss, G., Turhout, E., Winkel, G 2017: Participation in the implementation of Natura 2000: A comparative study of six EU member states. - Land Use Policy, 66: 346-355.
- Brescancin, F., Dobšinská, Z., De Meo, I., Šálka, J., Paletto, A 2017: Analysis of stakeholders' involvement in the implementation of the Natura 2000 network in Slovakia. - Forest Policy and Economics, 78: 107-115.
- Brodrechtova, Y., Navràtil, R., Sedmàk, R., Tuček, J. 2016: Using the politicized IAD framework to assess integrated forest management decision-making in Slovakia. - Land Use Policy (in press).
- Cohen, N., Arieli, T. 2011: Field research in conflict environments: Methodological challenges and snowball sampling. - Journal of Peace Research, 48: 423-435.
- De Meo, I., Cantiani, M.G., Ferretti, F., Paletto, A. 2011: Stakeholders' Perception as Support for

- Forest Landscape Planning. International Journal of Ecology, 1: 8.
- De Meo, I., Brescancin, F., Graziani, A., Paletto, A. 2016: Management of Natura 2000 sites in Italy: An exploratory study on stakeholders' opinions. - Journal of Forest science, 62: 511-520.
- Dimitrakopoulos, P., Joes, N., Iosifides, T., Florokapi, I., Lasda, O., Paliouras, F., Evangelinos, K. 2010: Local attitudes on protected areas: evidence from three Natura 2000 wetland sites in Greece. - Journal of Environmental Management, 91: 1847-1854.
- EEA-European Environmental Agency 2016: European forest ecosystems. State and trends. Publications Office of the European Union (EU), Luxemburg.
- Ferlin, F., Golob, A., Habic, S. 2006: Some principles for successful forest conservation management and forestry experiences in establishing the Natura 2000 network. Proceedings of the 7th International Symposium in Zlatibor Mountain, Serbia, May 2005: pp.1-11.
- Engelen, E., Keulartz, J., Leistra, G., 2008: European nature conservation policy making. In: Legitimacy in European Nature Conservation Policy, Springer, pp.3-21, Dordrecht.
- Ferranti, F., Beunen, R., Speranza, M. 2010: Natura 2000 network: a comparison of the Italian ad Dutch implementation experiences. - Journal of Environmental Policy and Planning 12: 293-314.
- Gallo, M., Pezdevšek Malovrh, Š., Laktić, T., De Meo, I., Paletto, A. 2018: Collaboration and conflicts between stakeholders in drafting the Natura 2000 Management Programme (2015–2020) in Slovenia. - Journal for Nature Conservation, 42: 36-44.
- Gaston, K.J., Jackson, S.F., Nagy, A., Cantù-Salazar, L., Johnson, M. 2008: Protected areas in Europe. Principle and Practice. - Annals of New York Academy of Sciences, 1134: 97-119.
- Grilli, G., Garegnani, G., Poljanec, A., Ficko, A., Vettorato, D., De Meo, I., Paletto, A. 2015: Stakeholder analysis in the biomass energy development based on the experts' opinions: the example of Triglav National Park in Slovenia. - Folia Forestalia Polonica, 3: 173-186.
- Grodzińska-Jurczak, M., Cent, J. 2011: Expansion of Nature Conservation Areas: Problems with Natura 2000 Implementation in Poland? - Environmental Management, 47: 11-27.
- Jones, N., Filos, E.E., Fates, E., Dimitrakopoulos, P.G. 2015: Exploring perceptions on participatory management of NATURA 2000 forest sites in Greece. - Forest Policy and Economics, 56: 1-8.
- Krajčič, D. 2006: Forestry as part of nature conservation in the European Union. Proceedings of the 7th International Symposium in Zlatibor Mountain, Serbia, May 2005: pp.22-27.
- Kraus, D., Krumm, F. 2013: Integrative approaches as an opportunity for the conservation of forest biodiversity. European Forest Institute, Freiburg.
- Laktić, T., Pezdevšek Malovrh, Š. 2018: Stakeholder participation in Natura 2000 management program: case study of Slovenia. - Forests, 10: 21.
- Lovrić, N., Lovrić, M., Martinić I. 2011: Analysis of participatory processes in the formulation of spatial plan for Nature Park Medvednica. - South-East European Forestry, 2: 61-71.
- Marchetti, M., Bastrup-Birk, A., Parviainen, J., Santopuoli, G., Vizzarri, M., Jump, A., Sotirov, M. 2017: The state of biodiversity in Europe's forest systems. In: Sotirov, M. (ed.), Natura 2000 and Forests. Assessing the state of implementation and effectiveness, What Science Can Tell Us, 7, European Forest Institute (EFI), pp. 17-37, Joensuu.
- Mitchell, R.K., Agle, B.R., Wood, D.J. 1997: Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. - Academy of Management Review, 22: 853-886.
- Niedziałkowski, K., Paavola, J., Jędrzejewska, B. 2012: Participation and Protected Areas Governance: the Impact of Changing Influence of Local Authorities on the Conservation of the Białowieża Primeval Forest, Poland. - Ecology and Society, 17: 2.
- Paletto, A., Graziani, A., Brescancin, F., De Meo, I. 2016: Trade offs e sinergie tra conservazione degli habitat e attività antropiche nei siti della rete Natura 2000: un'analisi percettiva. Dendronatura, 2: 76-93.
- Pietrzyk-Kaszyńska, A., Cent, A., Grodzińska-Jurczak, M., Szymańska, M. 2012: Factors influencing perception of protected areas - The case of Natura 2000 in Polish Carpathian communities. - Journal of Nature Conservation, 20: 284-292.
- Pinton, F., Alphandëry, P., Billaud, J.P., Deverre, C., Fortier, A., Geniaux, G., Perrot, N. 2005: La construction du réseau Natura 2000 en France: une politique publique à l'épreuve des scènes locales. – Report by the Ministère de l'Écologie et du Développement Durable within the framework.
- Rauschmayer, F., van den Hove, S., Koetz, T. 2009: Participation in EU biodiversity governance: how far beyond rhetoric? - Environment and Planning C: Government and Policy, 27: 42-58.
- Reed, M.S. 2008: Stakeholder participation for environmental management: A literature review. - Biological Conservation, 141: 2417-2431.
- Schultz, T., Krumm, F., Bücking, W., Frank, G., Kraus, D., Lier, M., Lovrić, M., van der Maaten-Theunissen, M., Paillet, Y., Parviainen, J., Vacchiano, G., Vandekerkhove, K. 2014: Comparison of integrative nature conservation in forest policy in Europe: a qualitative pilot study of institutional determinants. - Biodiversity Conservation, 23: 3425-3450.
- Sotirov, M., Storch, S. 2017: Resilience through forest policy integration in Europe? Domestic policy changes and institutional responses to absorb pressure to integrate biodiversity into forestry in France, Germany, the Netherlands and Sweden. - Land Use Policy (in press).
- Stoll-Kleemann, S. 2001: Opposition to the designation of protected areas in Germany. – Journal of Environmental Planning and Management, 1: 109-128.
- Weiss, G., Sotirov, M., Sarvašovà, Z. 2017: Implementation of Natura 2000 in forests. In: Sotirov, M. (ed.), Natura 2000 and Forests. Assessing the state of implementation and effectiveness. What Science Can Tell Us, 7, European Forest Institute (EFI), pp. 39-64, Joensuu.
- Winkel, G., Blondet, M., Borrass, L., Frei, T., Geitzenauer, M., Gruppe, A., Jump, A., de Koning, J., Sotirov, M., Weiss, G., Winter, S., Turnhout, E. 2015: The implementation of Natura 2000 in forests: a trans- and interdisciplinary assessment of challenges and choices. – Environmental Science Policy, 52: 23-32.
- Young, J.C., Pichards, C., Fischer, A., Halada, L., Kull, T., Kuzniar, A., Tartes, U., Uzunov, Y., Watt, A. 2007: Does stakeholder involvement really benefit biodiversity conservation? – Biological Conservation, 158: 359-370.

SAŽETAK

Zadnjih desetljeća, primjena politike zaštite prirode, zasnovane na principima javnog sudjelovanja, postala je jedna od glavnih izazova za znanstvenike i donositelje odluka. Primjena politike očuvanja prirode slijedi dva osnovna pristupa: izdvajanje na osnovi prostorne podjele zaštićenih područja od prizvodnih, i pristup integracije, na temelju kojega se uključuju proizvodne i zaštitne namjene prostora. U mnogo slučajeva primjena politike očuvanja prirode uzrokovala je porast sukoba radi različitih i kompetitivnih principa korištenja zemlje, različitih interesa i pogleda. Cilj istraživanja je analizirati mišljenja stručnjaka o mogućim sukobima, prilikama i teškoćama za ljudske aktivnosti, ograničenjima u gospodarenju šumom vezano na uspostavu novih zaštićenih područja. Istraživanje je strukturirano u tri osnovna koraka: analiza stručnjaka, anketiranje i statistička obrada prikupljenih podataka. Polustrukturirani upitnik putem emaila poslan je stručnjacima prema planiranom uzorku u svaku zemlju koja je uključena u COST CAPABAL projekt (COST Targeted Network TN1401 "CAPABAL" (41 sudionik u 10 zemalja). Podaci su statistički obrađeni, kako bi se naglasile razlike između EU28 zemalja članica i nečlanica i među institucijama (javna administracija, stručnjaci iz šumarstva i drvne industrije, fakulteta i istraživačkih institucija i okolišnih nevladinih organizacija). Na kraju prikupljanja podataka, sakupljn je 41 upitnik, koji su ispunili stručnjaci podijeljeni na zemlje članice EU (22 upitnika sa udjelom 54% u uzorku), i 19 stručnjaka iz zemalja izvan EU (46%). Promatrajući distribuciju uzorka prema zainteresiranim grupama, 41,5% ispitanika predstavlja javnu administraciju, 29,3% sveučilišta i istraživačke institute, 22% sudjeluje u lancu šuma-drvo, 7,3% su članovi nevladinih okolišnih udruga.

Rezultati pokazuju da su najčešće vrste sukoba one koje su vezane za procedure uspostave novih zaštićenih zona, s posebnim naglaskom na ograničenja prava vlasništva i dodatno administriranje. Sudionici iz zemalja koje nisu EU28 članice, više su naglasile važnost ograničenja lovnih aktivnosti kao potencijalni sukob u usporedbi za sudionicima iz EU28 zemalja članica. Vezano na mogućnosti i ograničenja ljudskih aktivnosti u zaštićenim područjima, rezultati su pokazali da je razvoj ekoturizma jedna on najznačajnijih prilika za razvoj ruralnih marginalnih područja. Najveća zapreka je otežano gospodarenja šumom (pridobivanje drva) vezano za zahtjeve očuvanja prirode.

Konačno, rezultati pokazuju da na ispitivanom uzorku najveća zabrinutost u gospodarenju šumom su dodatno vrijeme i novac potreban za nadzor i primjenu aktivnosti očuvanja prirode u zaštićenim područjima. Za ispitanike iz EU28 zemalja članica najveća zabrinutost vezano na aktivnosti gospodarenja šumom je primjena aktivnosti očuvanja prirode u zaštićenim područjima, dok su ispitanici izvan EU28 zemalja istaknuli primjenu pesticida kao najvažniju promjenu u gospodarenju šumom.

Stavovi stručnjaka su temeljna početna pozicija koju treba uzeti u obzir kako bi se umanjili sukobi između očuvanja prirode i ljudskih aktivnosti te povećala socijalna uključenost u politiku očuvanja prirode.

KLJUČNE RIJEČI: zaštićena područja, mreža Natura 2000, participatorni proces, sukobi, konzultacije, anketni upitnik.