THE EFFECT OF TOURISM SEASONALITY ON PROTECTED AREAS

Scientific paper

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Abstract
Purpose – This paper researches and analyzes the seasonality of tourist demand for visiting protected areas in relation to ecological, economical, technological and socio-cultural sustainability. It focuses on protected areas which has a special type of tourism, especially category II – national parks.
Design – After years of research it is possible to know whether the seasonality level has increased or decreased. Statistical research of the seasonality level in Croatian national parks, especially Plitvice Lakes and Krka, has shown that seasonality of tourist demand overlaps with tourist interest to visit the natural phenomenon or highly protected areas.
Methodology/Approach – Field research and interviews with the local inhabitants contribute to better understanding human needs and better understanding their existence in the protected areas. One of the components of the paper is the interdependency or the effect which seasonality has on the natural and cultural goods in protected areas, how and at what level they are being used.
Findings – The management model of protected areas must be directed towards the development and monitoring mechanisms to alleviate the negative effects of seasonality on protected areas. The development of appropriate forms of tourism activities that reduce the negative impact on the protected area imposes itself as a practical necessity. The stabilization of visits can be influenced by pre-defined rules of conduct, and partly affected by quality spatial distribution of visitors, at various locations within the site
Originality – Modern management tools must be used in order to establish a fair and balanced relationship between using and conserving in the world, which is reflected in the overall preservation of human values, as being indivisible from their natural environment.
Keywords sustainability, seasonality, tourism, management, protected area

INTRODUCTION

Spatial and temporal variations in tourism demand can be observed in many different destinations in the world during the entire year. Croatian tourism was marked by a distinct seasonality of tourism demand, which is typical for countries with warm seas (which includes the Mediterranean and the Adriatic). Reducing the seasonality or 'extension of the season' often arises as a vital strategic goal of tourism in Croatia. The European Commission Expert Group for Sustainable Tourism considers the decrease of seasonality as one of the key challenges for the sustainability of EU tourism.

Tourist valorization of protected areas is an ever present issue in managing protected areas. Tourism seasonality in protected areas is popularly regarded as one of the major problems that must be resolved. In other segments of tourism, tourism seasonality leads to an unfavorable use of accommodation capacities throughout the year. Tourism seasonality causes a different kind of problem when it comes to visits to protected areas. One of the problems that occur in protected areas is tourist demand in seasonal

tourism, which leads to an excessive number of visitors in certain sites. As a rule, these sites are tourist attractions, but they are also protected natural phenomena, which belong to strictly protected areas. Among the protected areas, in which certain types of tourist activities are permitted, are national parks. Their management strategy is based on sustainability, and from an economic point of view they are considered as specific tourist destinations. Considering that the preservation of nature is the primary goal of protected areas, the specificities of managing tourism in protected has to take in consideration the special conditions under which tourism can use these natural resources. In addition, economically speaking, these conditions result additional expense in protecting the area, which does not exist in other branches of tourism. Seasonal tourism in protected areas will always produce effects on the environment, despite the management's best efforts.

1. THEORETICAL FOUNDATIONS

Seasonal variations of tourist demand are a well-treated phenomenon in economic and tourism literature. While there is a general agreement that certain characteristics potentially affect the statistics, scientific economic theory attempts to provide evidence of the impact of certain economic variables on the seasonal distribution of tourist numbers. Seasonality in tourism represents a key topic in academic literature, from the first study BarOn[1] on the seasonality of tourism to the present day.

Seasonality can be described as a cyclical variation in the number of tourist visits, which is repeated every year[2]. A widely cited definition is that seasonality is "a temporal imbalance in the phenomenon of tourism and it can be expressed in the number of visitors, the expenditure of the visitors, the traffic on highways and other forms of transportation, the employment or in the number of admissions to attractions[3]." Natural and institutional factors are the two principal groups of factors that cause seasonality[4].

The phenomenon of seasonality as a major feature of modern tourism market[5]is one of the major topics that attract the attention of scientists and experts in the fields of economy and tourism, as well as the impact of this phenomenon on different economic

[1] BarOn, R., *Seasonality in Tourism. A Guide to the Analysis of Seasonality and Trends for Policy Making,* London: The Economist Intelligence Unit Ltd., Technical Series N.2., 1975.
[2] Koenig-Lewis, N., Bischoff, E.E., "Seasonality research: The state of the art", *International journal of tourism research*, Vol. 7, 2005, 201-219.
[3] Butler, R. W., "Seasonality in tourism: issues and implications", *Tourism – the State of the Art,* ed. by Seaton, A., Chichester, UK: Wiley, 1994, 332-339.
[4] BarOn, R., *Seasonality in Tourism. A Guide to the Analysis of Seasonality and Trends for Policy Making,* London: The Economist Intelligence Unit Ltd., Technical Series N.2., 1975.
[5] Jang, S., "Mitigating Tourism Seasonality: A quantitative approach", *Annals of Tourism Research*, Vol. 31, 2004, 819-836; Chung, J.Y., "Seasonality in tourism: a review", *e – Review of Tourism Research,* Vol. 7, 2009, 82-96; Cuccia, T., Rizzo, I., "Tourism seasonality in cultural destinations: Empirical evidence from Sicily", *Tourism management, research, policies, practice*, Vol. 32, 2011, 589-595; Vergori, A., "Forecasting tourism demand: the role of seasonality", *Tourism Economics*, Vol. 18, 2012, 915-930; Cannas, R., "An Overview of Tourism Seasonality: Key Concepts and Policies", *AlmaTourism, Journal of Tourism, Culture and Territorial Development*, Vol. 3, 2012, 40-58.

and social trends. The causes of seasonality have been researched in recent years[6], especially the seasonality rates in Europe; experts are trying to show the possibility of modeling the non-working days and holidays on the example of Denmark.

Croatian scientists have talked publicly about the issue of seasonality in Croatian tourism since the seventies, and at the same time trying come up with solutions[7]and measures to solve this key problem and trying to alleviate its negative effects. The causes of seasonality and the consequences[8] of this phenomenon, which occurs in Croatian tourism has recently been analyzed in the Republic of Croatia.

The issue of seasonality of tourism of national parks, especially Plitvice Lakes, was recognized as early as in the late seventies. If the number of visits to a certain site depends on the climatic conditions, or are limited due to seasons, then visits should be divided into seasonal and reduced visitations[9]. This division has to take in account the months in which attendance is usually high and in which it is reduced. In that case, the maximum number of allowed visits per day and per month for protected areas is calculated only for months with a higher number of visits because during the off-season months, the number of visitors is reduced and poses no threat to the site or to the environment. Visitors 'guidelines for the accommodation capacities in the environment are an integral part of preventive measures for the preservation of the entire nature of protected areas, which enhances their significance. In a greater or lesser extent, almost all countries of the world have established their national parks and other types of protected areas to ensure long-term protection of natural resources. In many countries, national parks have played a significant role as tourist attractions. In some other countries, they are the foundation of a small, but an often important tourism industry[10]. The concept of sustainable tourism is becoming an integral part of managing national parks in developed countries, whose example was followed by developing countries and countries in transition.

[6] Marcussen, C.H., "Seasonality in tourism – Separating the natural and institutional causes", 2nd International Conference on Sustainable Tourism Management, Chaing Mai, Thailand, May, 2011.
[7] Alfier, D., "Neki elementi za antisezonsku politiku u našem turizmu", *Turizam - izbor radova*, Institut za turizam, Zagreb, 1994, 111-127.
[8] Čavlek, N., Bartoluci, M., Kesar, O., Čižmar, S., and Hendija, Z., "Prilog novim odrednicama turističke politike u Hrvatskoj",*Acta turistica*, Vol. 22, 2010, 137-160; Rutin, J., "Coastal tourism: a comparative study between Croatia and Tunisia", *Tourism Geographies: An International Journal of Tourism Space, Place and Environment,* Vol. 12, 2010, 264-277; Perić, J., JurdanaSmolčić, D., GrdićŠverko, Z., "Croatian tourism sector's adjustment to climate change". *Tourism Management Perspectives*, Vol. 6, 2013, 23-27; Kožić, I., Krešić, D., Boranić-Živoder, S., "Analiza sezonalnosti turizma u Hrvatskoj primjenom metode Gini koeficijenta", *Ekonomski pregled*, Vol. 64, 2013, 159-182.
[9] Movčan, J., „Ocjena ukupno dozvoljivog kapaciteta i način posjećivanja u Planu", objavljeno u: *Plitvička jezera Nacionalni park (1949-1999)*, 1971, 116-117.
[10] Butler, R. W., Boyd, S. W., "Tourism and parks - a long but uneasy relationship". In RW Butler and SW Boyd (ed), *Tourism and National Parks: Issues and Implications.* Chichester: JohnWiley and Sons, 2000, 3-11.

The concept of sustainable tourism, accompanied by the phenomenon of seasonality is an integral part of the published guidelines for planning and managing protected areas in the world[11]. The development of the concept "the threshold of sustainability"[12] of tourism in protected areas; The Threshold of Sustainability for Tourism within Protected Areas[13] is a more recent concept and it continues to be taken as a measure to lessen the negative impact of seasonality. The scientific analysis in the perception of the negative context of seasonality[14]indicates that the problem is indeed recognized, but there is a small number of successful attempts at reducing the occurrence of seasonality in the international tourism practice. One of the better known programs that attempts to reduce seasonality in the European Union is the Calypso program. In its final report, the opinion of the European Commission was that the program has produced some results, but it was not entirely successful[15].

In recent years, it is more and more obvious that the seasonality in tourism is tightly connected to the estimate of potential implications of climate changes. Even more current is the issue of global climate changes and how those changes will affect tourist flows in the future. It is becoming clear that climate change is making these less certain and less predictable[16]. With an overview of the potential impacts of global warming, Angewand Viner[17], while emphasizing that the trends point towards a warmer climate, it is estimated that temperature will have major consequences on the tourism industry, especially in regions where outdoor recreation is important, as it is, for example, in the Mediterranean destinations.

[11] Eagles, Paul FJ., McCool, Stephen, F., Haynes, Christopher DA., *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*, IUCN, Gland, Switzerland and Cambridge, UK.xv+183 pp. 2002.; Dudley, N., editor. *Guidelines for Applying Protected Area Management Categories*, Gland, Switzerland: IUCN. x+86 pp. 2008.

[12] Drumm, A., "The Threshold of Sustainability for Protected Areas", *BioScience*, Vol.58, 2008, 782-3.

[13] Drumm, A., McCool, S., Rieger, J., *The Threshold of Sustainability for Tourism within Protected Areas: a Quick Guide for Protected Area Practitioners*, Protected Area Quick Guide Series Editor, J. Ervin. Arlington, VA: The Nature Conservancy, 2011.

[14] Fernández-Morales, A., "Decomposing seasonal concentration", *Annals of Tourism Research*, Vol. 30, 2003, 942-956; Nadal, J.R., Font, A.R., Rosello A.S., "The economic determinants of seasonal patterns", *Annals of Turism Research*, Vol. 31, 2004, 697-711; Jang, S., "Mitigating Tourism Seasonality: A quantitative approach", *Annals of Tourism Research*, Vol. 31, 2004, 819-836; Koenig-Lewis, N., Bischoff, E.E., "Seasonality research: The state of the art", *International journal of tourism research*, Vol. 7, 2005, 201-219; Koc, E., Altinay, G., "An analysis of seasonality in monthly per person tourist spending in Turkish inbound tourism from a market segmentation perspective", *Tourism management*, Vol. 28, 2007, 227-237; Fernández-Morales, A., Mayorga-Toledano, M.C., "Seasonal concentration of the hotel demand in Costa del Sol: A decomposition by nationalities", *Tourism Management*, *research, policies, practice,* Vol. 29, 2008, 940-949.

[15] Ram boll Management Consulting, Détente consultants, *Calypso study final report*, Bruxelles: European Commission, DG Enterprise and Industry, 2010.

[16] Butler, R. W., "Seasonality in Tourism: Issues and Implications", *Seasonality in Tourism,* ed. by Baum, T. and Lundtorpe, S., Oxford UK: Pergamon, 2001.

[17] Agnew, M. D., Viner, D., "Potential impacts of climate change on international tourism", *Tourism and Hospitality Research*, Vol. 3, 2001, 37-60.

2. METHOD

Using statistical data, this paper examines the seasonal pattern of visitation of the most visited national parks of continental Croatia, Plitvice Lakes and Krka. The official data concerning the number of recorded overnight stays divided into major seasons was retrieved from the Central Bureau of Statistics (CBS) of Republic of Croatia for the purposes of this paper. Data is organized in a time span of 84 months (January 2001 - December 2007). Data is also available on the online information system of the Institute for Tourism, the Business Intelligence System for Tourism (BIST). The data was used to assess the seasonal variations of Croatian tourism for this period in order to get the answer to the question whether the seasonal structure of demand is stagnating or not. In order to obtain the answer to the same question, but in the context of national parks, the data used for the part of this paper was taken from the official data of the Central Bureau of Statistics of Republic of Croatia.

In order to examine the seasonal pattern of visitation of the most visited national parks in continental Croatia, Plitvice Lakes and Krka, the data is organized in a time span of 216 months (January 1996 - December 2013). Data in the official statistics of the CBS is not recorded in its entirety, and they have been retrieved from the management on demand.

Due to the methodological limitation of the tourism statistics of national parks, the seasonal variation was not produced for all Croatian national parks. This type of seasonal variation would be possible to do only with assessment and consultation.

The other used data was retrieved from the statistical bulletin of the USA National Park Service, since the USA was taken as an example of precise visitation logging for national parks and as an example of the phenomenon of seasonality on a national level.

The zone of the Skradinski Buk waterfall (Krka National Park)was used as an example in order to assess the impact of seasonality, which as a result or its consequence has the saturation of a certain zone , which potentially poses a threat to the stability of the zone as an unfavorable outcome for nature and for the visitors. The assessment of the saturated zone Skradinski Buk (from August 2013) was carried out by the Ruđer Bošković Institute based on the findings and based on the assessment of capacity in the area intended for visitation.

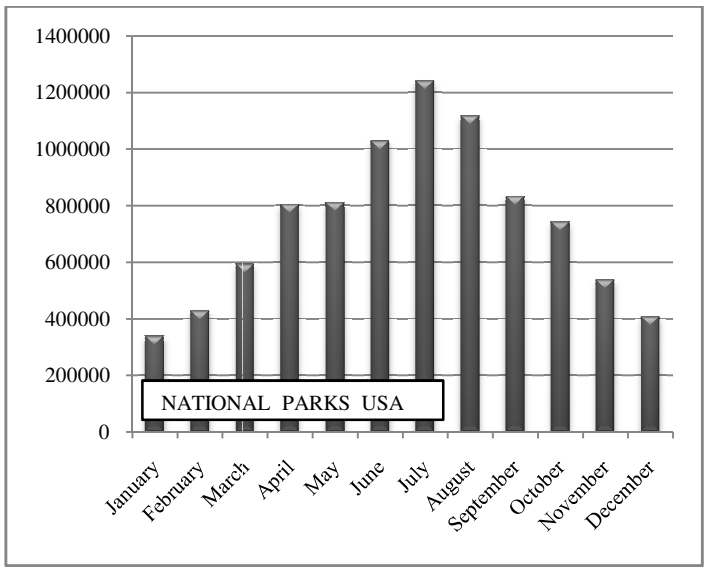
3. THE SEASONAL VARIATION IN TOURISM OF PROTECTED AREAS

In the Republic of Croatia there is a known problem of seasonality of tourism of national parks, though so far there has been no detailed analysis or an analysis of the consequences of this phenomenon neither there have been no measures implemented to alleviate its negative impacts. In terms of accessing the seasonal pattern of visitation in Croatian national parks, it is necessary to measure the number of users per month (or per seasons), as well as to carry out evaluation studies of reception capacities. The number of visitors during the high season cannot be precisely determined on a national level. Kornati National Park, for example, stats are based on the arrival of a boat and

the docking of tourist boats (with an estimate of five people per boat, and 50 people per group of boats) alongside individual entrances. The same data is available for annual estimates, and to get an estimate per season, it would be necessary to address the employees personally. Therefore, it would be possible to get an estimate for the high season for national parks in Croatia but that estimate would not be completely accurate. The official statistics in a form of a common database of tourist visits to national parks at a EU level does not exist for now. It is important to emphasize further development of software as a stronghold for establishing a global database of information on protected areas. The concept of sustainable tourism in protected areas continues its global application, and the same can be expected in the future with a unique logging of visitation of protected areas per month (or per high season). Monthly visitation of national parks in the USA is published by the National Parks Service and it is therefore possible to identify and analyze the phenomenon of seasonality.

Figure 1 shows an overview of the average monthly attendance of national parks in the United States, based on the number of visitors per month and it serves as an illustration of seasonality of tourism in national parks of the country.

Figure 1: **2006 Average Numbers of Visitors per Day to NPS Units**



Source: National Park Service, U.S. Department of the Interior, Statistical Abstract 2006, Public Use Statistics Office Social Science Program, 2006, pp. 16.

Hence, the success in managing tourism in protected areas is dependent upon many factors; however, it is important to understand if the pattern of arrivals fluctuates.

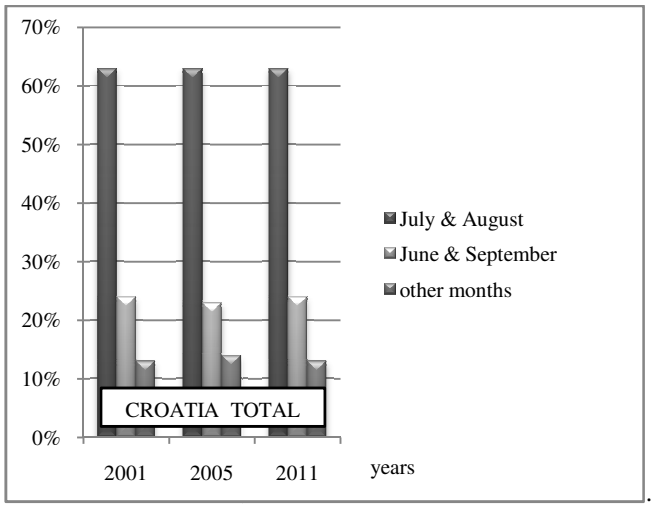
As the examples shown, which clearly illustrate the main concern of this paper, the paper used the most visited national parks of continental Croatia, Plitvice Lakes and Krka. Krka National Park has a national category of protection, while Plitvice Lakes is the only Croatian protected area of nature placed on the UNESCO World Heritage List.

With the examples of Krka National Park and Plitvice Lakes National Park the main point of the research is whether there are spatial dimensions of seasonality that can be detected in the given area of study.

In order to examine the seasonal pattern of visitation of the most visited national parks of continental Croatia, Plitvice Lakes and Krka , the data is organized in a time span of 216 months, (January 1996 - The December 2013) , figure 3 and 4. In Figure 2 the data is organized in a time span of 84 months (January 2001 - December 2007) and they refer to Croatian tourism in total as a way of comparison.

In these three figures the data is organized by months (July and August, June & September, other months).

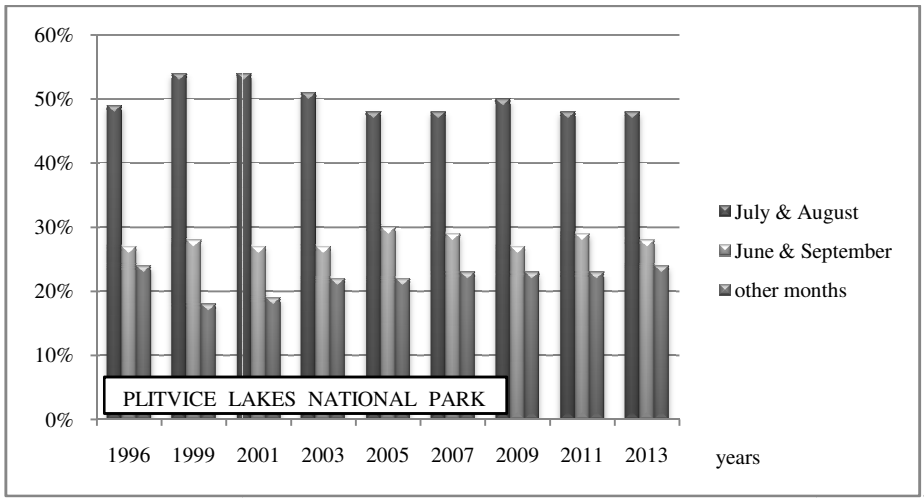
Figure 2: **Structure of total overnight stays in the Republic of Croatia, divided into main season, in %**



Source: Report: BIST – System of business intelligence in tourism, www.iztzg.hr

Utilization of accommodation capacities reflects the pronounced seasonality of demand. In 2011 63% of all overnight stays were recorded during the two summer months, July and August. In the period between 2001 and 2011, seasonal structure of demand was stagnating.

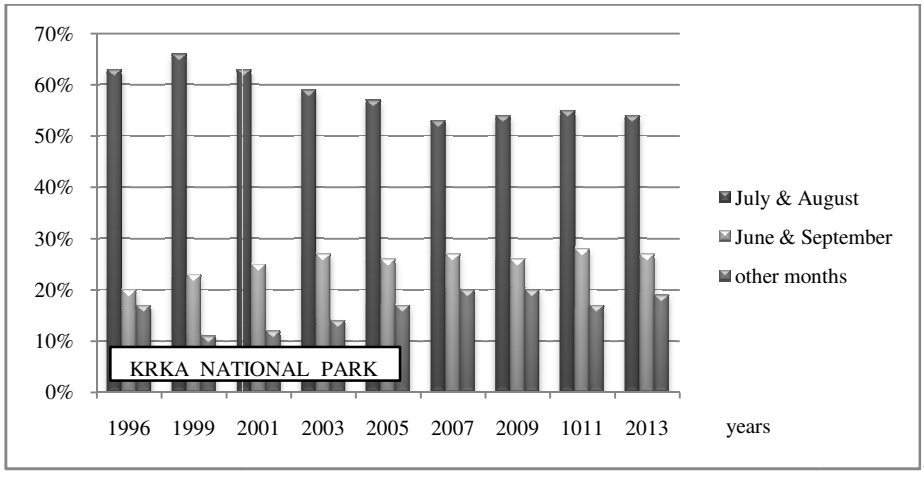
Figure 3: **Pattern of visitation to Plitvice Lakes National Park (by number of tickets sold, with the exception of free entrances) divided into main seasons for the period between 1996 and 2013, in %**



Source: Made by the author, according to the data from the official data of the Plitvice Lakes National Park

By analyzing the structure, the pattern of visitations Plitvice Lakes National Park reflects extreme tourism seasonality. In 2013, 48% of all visits logged were during the two summer months, July and August. In the observed period of 1996-2013, seasonal structure of demand was stagnant (with slight fluctuations).

Figure 4: **Pattern of visitation to Krka National Park (by number of tickets sold, with the exception of free entrances) divided into main seasons for the period between 1996 and 2013, in %**

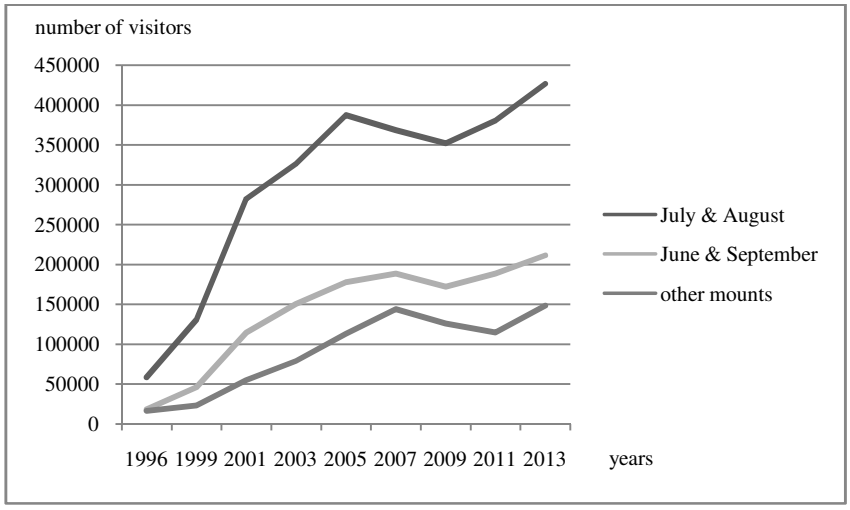


Source: Made by the author, according to the data from the official data of the Krka National Park

By analyzing the structure, the pattern of visitations to the Krka National Park reflects the extreme tourism seasonality. In 2013, 54% of all overnight stays were recorded during the two summer months, July and August. In the period between 1996 and 2013 in seasonal structure of demand, there was a declining trend in visitors' arrivals by 9% in July and August (from 63% in 1996 to 54% in 2013) compared to the overall structure. Furthermore, we can see the continuous sequence of the trend in increased arrivals by 7% in June and September (from 20% in 1996 to 27% in 2013). The remaining months mark increased visits by 2% (from 17% in 1996 to 19% in 2013).

The observation of trends in overall visitation numbers were based on the above research findings and observed positive trends (structure in %) in the visitation in that period at Krka National Park (the division of months was done in the same way as in the previous figures).

Figure 5: **Trends in the total number of visitors to the Krka National Park in the main season**



Source: Made by the author, according to the data from the official statistics of the Krka National Park

By analyzing the figures in numbers, it was observed that there was a continuous upward trend in the number of visitors in July and August (from 58,304 in 1996 to 426,614 in 2013). The months of June and September record an increase (from 18,512 in 1996 to 211,485 in 2013), as well as other months (from 16,183 in 1996 to 148,333 in 2013). As an illustration, the total number of visitors in 1996 amounted to 92,999, and in 2013 to 786,432 visitors.

The management of national parks carries out various measures in preventing potentially negative effects of seasonality of tourism in environmentally sensitive locations. Some of the measures can be reflected in the limited access to the protected area, the existence of a system of permits for entry by the sometimes vague priority principles, waiting lists that limit the number of visitors and similar measures.

Approaching the recommended upper limits of the carrying capacity of the environment for visitors is an indicator of reduced quality of experience. The ways of applying methods of protection of the visitor experience and resources (the Visitor Experience and Resource Protection Method - VERP) was developed and implemented by the U.S. National Parks Service, with the aim of formulating quality standards according to the variable number of visitors[18]. Creative promotion can provide a powerful tool in influencing visitors.

4. THE IMPACT OF SEASONALITY ON THE ECOLOGICAL SUSTAINABILITY AS A PERCURSOR TO ECONOMICAL AND SOCIOCULTURAL SUTAINABILTY

Due to the extreme seasonality of tourism in protected areas, there is a contrast in the congestion of space during and after the tourist season. Environmentally sustainable development is the one that respects the carrying capacity, that is, the ability to withstand environmental pollution and exploitation of natural resources of protected areas. The basic method involves a combination of two scenarios: time (peak hour peak day peak season) and space (specific area).

In the event that the method of determining tolerable tourist capacity of the landscape is used to assess adherence to guidelines of tolerable tourist capacity, that is, the intensity of the use of the site, the coefficient of saturation is used as an indicator. The coefficient implies saturation ratio of the total number of users on the site and the physical tolerance of tourist capacity of the site[19]. The marginal value of the coefficient is 1, and it indicates that the total number of concurrent users equals tolerable tourist capacity, values below 1 indicate the locations where the number of users is fewer, which means that the environmental stability of the site is not compromised, while values above 1 indicate excessive use of the site with probable negative environmental effects on the site.

The fundamental values because of which a certain area was proclaimed protected in the first place may be threatened because of tourist saturation, but it is also an indicator of reduced quality of experience for the visitors. The two main characteristics of the saturated zone in terms of conservation and in terms of tourism are a general threat to the stability of the zone (which should be assessed by analytical methods) and a reduced experience of visitors caused by the phenomenon of saturation.

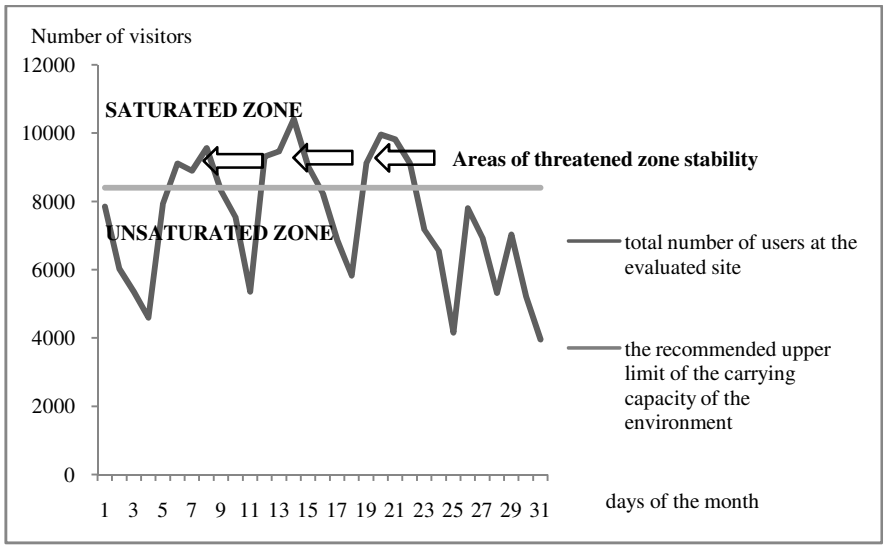
The saturated zones with areas of threatened stability prove the increasing implications of predictions of future trends. It is quite clear that there is still insufficient level of understanding of the phenomenon of seasonality and its impact on sustainable tourism development of protected areas.

[18] World Tourism Organization, *Indicators of Sustainable Development for Tourism Destinations: A Guidebook,* Madrid, 2004.
[19] Šundov, M., *Geomorfologija Dubrovačkog primorja i geo-ekološko vrednovanje reljefa*, Medicinska naklada, Zagreb, 2004.

Proven on the example of the Krka National Park it is possible to see the seasonal congestion of certain parts of the park, such as Skradinski Buk as the fundamental phenomenon of the park, because of the uneven spatial distribution of visitors.

With a daily figure of 11,593 visitors, Skradinski Buk crossed the line of saturation of 10,500 visitors on August 18th 2005 [20].

Figure 6: **The impact of seasonality on the saturation of the zone with the example of Skradinski Buk (Krka National Park) in August 2013**



Source: Made by the author, based on the official data on the number of sold entrance tickets from the official statistics of Krka National Park, Kušen, E. et al, Tourism valorization of the Krka National Park, Institute for Tourism, Zagreb, 2003; Ruđer Bošković Institute, The report on the scientific research project, Accommodation capacity of the environment of the Krka National Park

By observing the example of Skradinski Buk (Figure 6), where the number of visits was 98% in August of 2013, with only 2% falling under the entire remaining area, we can conclude that it is necessary to manage the tourist flow better in order to preserve nature and improve the satisfaction of visitors.

However, the conclusions of the Ruđer Bošković Institute in Zagreb from 2013 cast a doubt on the validity of previously popular beliefs. There was a clear and unequivocal belief that the pollution of water resources was insignificant.

However, the recommendation for Skradinski Buk was to keep the number of daily visits at 8400 people. Moreover, the conclusion that certainly attracts attention is the recommendation which stated that it was in the interest of nature preservation to keep

[20] Marguš, D., „Problemi i prioriteti zaštite prirodne baštine Nacionalnog parka Krka“, u Marguš D. (ur.) Simpozij Rijeka Krka i Nacionalni park Krka, prirodna i kulturna baština, zaštita i održivi razvitak: zbornik radova, Javna ustanova Nacionalni park Krka, Šibenik, 2007, 1099-1115.

the highest concentration of visitors around the area of Skradinski Buk. It is believed that the idea of redirecting visitors from the area of Skradinski Buk in order to minimize the impact of visitors on this site is simply wrong, even if guided by good intentions. In order to protect as much of the natural heritage, it is necessary to steer a large number of visitors to the area of Skradinski Buk and allow them a pleasant stay there, and the possible development of other parts of National Park Krka should be linked exclusively to the benefit of the local community because for that, according to the analysis, there is no other justification[21].

The common opinion is that from the standpoint of protecting and preserving the usual highlights are the negative impacts of tourism on sustainability, while minimizing their economic significance. This example has evolved, so to speak, as support to the thesis of benevolence of determining "the limits of acceptable change", and "sustainability threshold" of tourism in protected areas, provided that it respects the visitors' experience. Finally, with this example, the conditions show the point of view of nature protection and conservation which highlights the positive impact of tourism on sustainability, and emphasizes its economic importance (with entrance tickets purchased in 2012 at the entrances of Skradinski Buk, Krka National Park has had 64 million kuna of revenue). Surely, it would be wrong to misunderstand that there is a tolerance of saturation in certain zones of strict protection, quite to the contrary – the manager of the park is expected to create efficient measures in order to increase the reception capacities. In the end, we can conclude that the contemporary means of communication and management interested in preservation put the emphasis on promoting the positive message and possibilities and not the limitations – while emphasizing the different ways of responsible travelling.

5. THE DIFFERENT IMPACTS OF SEASONALITY ON ECONOMICAL AND SOCIOCULTURAL SUSTAINABILITY ON THE INDEGENOUS PEOPLE AND LOCAL COMMUNITIES

Because of the implications of significance and differences in effects, but also because of the different legal status, at first there was a difference in the terms indigenous people and local community. In the global discourse there are difficulties with defining these terms and determining their respective rights.

The World Council of Indigenous People defines indigenous people as a group of inhabitants whose ancestors have inhabited the land on which their descendants live today since ancient times and who are aware of their own character and social traditions. The Universal declaration of cultural diversity[22] roughly determines the status of autochthonous people. The local communities generally live on the periphery of protected areas, while autochthonous communities live inside of them.

[21] Institut Ruđer Bošković, *Izvješće o radu na znanstveno-istraživačkom projektu: „Prihvatni kapacitet okoliša za posjetitelje Nacionalnog parka Krka"*, Zagreb, 2013., pp. 82.
[22] UNESCO, The Universal declaration of cultural diversity, Paris, 2001.

It could be said that, in the economic discourse, there are economic benefits of using the protected areas should be used more by the autochthonous people through investments in the protection of their cultural diversity. This indication should be substantiated by detailed analysis and arguments (which is not the topic of this paper). The importance of historical context of being original (indigenous) people in a particular area is reinforced in indigenous people. In consideration of the historical and cultural context of the importance of being indigenous peoples in a protected area, we can conclude that the assessment of "threshold of viability" of tourism in protected areas, with the growing implications of the challenges that tourism brings to them, they cannot be identical for indigenous peoples and for local communities.

They are essentially different. Negative implications whether of tourism or of something else can have disastrous consequences on the identity and cultural values of the autochthonous people. The same does not diminish and does not dispute the importance of the local community, which is not indigenous people, although the estimates of "threshold of viability" of tourism, and socio-cultural sustainability threshold, the effects should be correctly assessed on the basis of anthropological, ethnological and historical scientific studies, on foundations of which it would be possible to build the economic study of assessment of influence and threshold of socio-cultural sustainability.

The socio-cultural and economic sustainability of indigenous peoples and/or local communities is reflected in the demographic trends. Negative demographic trends are certainly not in favor of indigenous peoples, but they are neither in favor of the protected area, which thus loses an important element of anthropogenic cultural diversity.

However, despite the negative socio cultural influences, certain authors, Mathieson and Wall, Murphy, Hartmann[23] found some positive effects, such as the fact that during the off season it allows the local community to keep their identity. Although it is not precisely stated, it is implied that indigenous peoples are not out of this context. Authors Mathieson and Wall[24], take the position that the "dead" season allows the community to relieve stress and helps to preserve their identity, as well as traditional social patterns in the community, sometimes disturbed during the summer peaks.

CONCLUSION

The management model of protected areas must be directed towards the development and monitoring mechanisms to alleviate the negative effects of seasonality on protected areas. The development of appropriate forms of tourism activities that reduce the negative impact on the protected area imposes itself as a practical necessity. The stabilization of visits can be influenced by pre-defined rules of conduct, and partly affected by quality spatial distribution of visitors, at various locations within the site.

[23] Mathieson, A., Wall, G., *Tourism: economic, physical and social impact*, Longmann: Harlow, UK, 1982.; Murphy, P., *Tourism: a Community Approach*, New York: Methuen, 1985.; Hartman, R., "Tourism, seasonality and social change", *Leisure Studies*, Vol. 5, 1986, 25-33.
[24] Mathieson, A., Wall, G., *Tourism: economic, physical and social impact*, Longmann: Harlow, UK, 1982.

Modern management tools must be used in order to establish a fair and balanced relationship between using and conserving in the world, which is reflected in the overall preservation of human values, as being indivisible from their natural environment. Findings of this paper should help create new measures and policies aimed at achieving and maintaining a better distribution of tourism demand throughout the year, in order to increase the benefits of tourism.

For observed areas there is still not enough understanding of the phenomenon of tourist seasonality, its implications, whether they are positive or negative, causes and necessities of taking drastic measures in order to alleviate the negative implications. In relation to that, and especially when it comes to saturated zones, the question imposed is what are the management measures that should be used in order to decrease seasonality of tourism and alleviate its consequences?

The concentration of tourist visits to protected areas at certain times of the year has a significant impact on sustainability. It is therefore of great importance that the impacts are estimated as accurately as possible before deciding whether they are acceptable. However, in assessing the same, it is important to consider what would be the environmental impacts if the protected areas and their tourism industry were replaced with some other use, such as agriculture, forestry, mining or urbanization. In recent years, there have been many efforts in order to manage protected areas in accordance to the concept of sustainable development.

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