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Additional Material

Ecological features

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However, the vegetation of Vlasina is characterised with various types of herbaceous meadow and pasture vegetation as well. These are often secondarily developed derivatives of the meadow-pasture or turf vegetation developed on account of the cleared forest communities, namely associations of the type Festuco- Nardetum strictae, Danthonio-Trifolietum velenovskyi, and more rarely Diantho-Armerietum rumelicae.

On swampy habitats near mountain creeks of Vlasina, a specific community of the *Hygronardetum strictae* type is developed, though more locally present than the previously mentioned communities of the *Nardetum* type. In some cases, the *Hygronardetum* communities are developed along the edge of the peat bog, therefore containing elements of the peat bog vegetation.

The communities *Rhinantho-Cynosuretum* and *Trifolio-Cynosuretum* cristati represent hygro-mesophilous meadows developed in fragments on a deep to moderately deep wet soils of Vlasina in the zone of hilly beech forests. The meadow vegetation built of *Deschampsia caespitosa* is particularly interesting. Such communities occur in several places around Lake Vlasinsko, on swampy habitats around creeks, peat bogs, etc., forming characteristic bumpy areas made from large clusters of this grass.

The potential vegetation of valley and swampy meadows is developed in wet habitats around larger creeks and rivers. The valley meadows are represented with communities *Deschampsietum caespitosae*, *Equiseto - Scirpetum silvaticae*, and *Filipenduletum ulmariae*. The *Deschampsietum caespitosae* is the community of wet valley and mountain meadows that has intrazonal and patchy distribution in the mountain areas of Vlasina in the zone of the beech forest (*Fagetum montanum*), near the creeks that empty into lake Vlasinsko, and around the lake itself.

Swampy communities include the alliances Magnocaricion, Caricetum rostrato-vesicariae, Caricetum gracilis and in fragments the alliances Phragmition, Phragmitetum australis, Sparganio - Glycerietum fluitantis, and Glycerietum maximae. The Phragmitetum australis is a swampy community that is developed around mountain creeks that empty into the lake, in the form of smaller fragments. The localities around Lake Vlasinsko are among the last existing habitats in Serbia for the species Pedicularis palustris (marsh lousewort). The specific vegetation with the community of Elatino triandrae-Eleocharetum acicularis is developed in occasionally flooded areas around the lake.

The peat bog vegetation of Vlasina is represented with the mosaic complex of various associations and is very intricate. Ranñelović (1994) placed the plant cover of the Vlasina peat bog into the class *Scheuchzerio - Caricetea fuscae*, which includes association of the flat peat bogs and transitory peat bogs. The same author distinguishes two orders - *Caricetalia fuscae* for the plant communities of low sedges, and the order *Scheuchzerietalia palustris* – the vegetation of the pure and mixed "sphagnetums". The peat bog vegetation in Vlasina is intrazonal vegetation, which means that it is developed inside the forest belt. The largest areas covered with such vegetation are developed on floating peat islands and around the lake, representing the fragments of the former Vlasina peat bog. The vegetational order *Caricetalia fuscae* is represented with the vegetation of the alliance *Caricion canescentis-nigrae* on peat deposits in valleys of larger creeks, around creeks on mountain tops that surround the lake, and on peat islands.

The association Eriopohoro - Caricetum flavae is developed on a shallow layer of peat on a gently inclined terrain near the creeks. It is significant that the number of the sphagnum mosses in this community is very small, although they are present in 70% of the stands. The order Scheuchzerietalia palustris is represented with two alliances, Rhynchosporion albae and Salici - betulion pubescentis. From the alliance Rhynchosporion albae, three associations that are elements of the transitory peat bog vegetation are developed in Vlasina. Such vegetation represents the fragments of the vegetational peat bog formations of central, western, and northern Europe. In the Balkan Peninsula, it has a disjunctive distribution, and it has a tremendous significance for the survival of the boreal flora and biodiversity conservation. The association Sphagno-Equisethum fluviatilis represents a community of pioneer plants of the sphagnum peat bogs, and it is developed on muddy and peat soil with an adequate amount of water in the ground. This association is described precisely from the area of the Vlasina plateau where it mainly inhabits sphagnum islands. The community Drosero - Caricetum stellulatae, also from the alliance Rhynchosporion albae, is developed on a very acid terrain, on peat

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islands, and near Bratašnica, in the valley of the River Murina

Reka, and in other places as well. The association *Caricetum limosae* is best developed in peat bogs around creeks that empty into the Lake Vlasinsko. The community is very rare in the Balkan Peninsula. The presence of the species *Carex limosa* is a significant feature of this community, as well as of a number of mostly sphagnum mosses.

The vegetation of peat sibljak is developed on peat islands of Lake Vlasinsko, along with other peat communities. This is the formation physiognomically characterised with short trees of the downy birch (Betula pubescens) and with the shrubs of the rosemary-leaved willow (Salix rosmarinifolia). This community represents a true rarity not only for Serbia, but for the Balkan Peninsula as well. The communities of the peat bog sibljaks with other peat bog communities are rich in species of northern distribution. Therefore, the peat islands and peat bogs of Vlasina generally represent one of the most important refugia of the boreal flora and vegetation in the southern part of Europe.

The formation of the reservoir in place of the former Vlasinsko Blato created the more favourable conditions for the development of the hydrophyte vegetation. The characteristics and the distribution of such vegetation is strongly influenced by the water regime. The vegetation of occasionally flooded areas is developed throughout the surroundings of Lake Vlasinsko. The decrease of the water level in the lake causes the progression of the vegetation of the cited alliance that is mixed with the elements of the flotant vegetation adapted to terrestrial way of life. The zone of the emerse vegetation is not very distinct, and the belt of the flotant vegetation has an "amphibian" character.

The lake is generally not much overgrown with aquatic vegetation. Such condition is the consequence of the low concentration of mineral substances, high level of the humic acids, and low water temperature. The macrophyte vegetation is best developed in coves and bays. The bottom of the west shore is overgrown with the vegetation in the form of a narrow belt, while the bottom of the eastern shore is mostly without the vegetation. The macrophyte vegetation of Lake Vlasinsko can be divided into three vertical zones: the zone of submerse vegetation, the zone of the flotant vegetation, and the zone of the vegetation of occasionally flooded areas.

Along with the common bladderwort (*Utricularia vulgaris*), the very rare and relic lesser bladderwort (*Utricularia minor*) can also be found in the vegetation of the peat areas.

Noteworthy fauna

<u>Ichthyofauna</u>

The first studies cite only three species as autochthonous for Lake Vlasinsko: trout (Salmo trutta), minnow (Phoxinus phoxinus), and Mediterranean barbel (Barbus meridionalis). In comparison to that, during more recent studies (1992, 1994, 1995) as much as 11 species were recorded, of which only one, the Mediterranean barbel, as the autochthonous. These are Salmo trutta trout; Oncorhynchus mykiss rainbow trout; Cyprinus carpio carp; Carassius carassius crucian carp; Carassius auratus goldfish; Ctenopharyngodon idella grass carp; Leuciscus cephalus chub; Barbus peloponnesius Mediterranean barbel; Rutilus macedonicus Macedonian roach; Rutilus basak; Tinca tinca tench; Alburnus albidus white bleak; Scardinius graecus Greek rudd; Ictalurus rebulosus brown bullhead; Lepomis gibbosus pumpkinseed, and Perca fluviatilis perch.

The first introduction of allochthonous representatives of the ichthyofauna into the waters of Lake Vlasinsko was done during the middle of 1950's, when Ohrid trout was introduced from Lake Ohrid. At the end of 1970's and the beginning of 1980's the grass carp was introduced into the lake with the purpose to slow down the overgrowing process of the lake, since this is a distinct herbivorous species. The tench, carp, crucian carp, and goldfish were also introduced, as well as, probably accidentally, perch, pumpkinseed, and brown bullhead. Furthermore, the white bleak, and with it probably *Rutilus basak*, Macedonian roach, and chub were also introduced. During the past period, introduction of allochthonous salmonid species was also done, primarily of the rainbow trout and brook trout. There were even attempts to introduce grayling and eel into the lake. One of the alarming facts in the ichthyofauna of Lake Vlasinsko is the disappearance of the minnow. In this way, Lake Vlasinsko, in spite of its extremely good water quality that is suitable for salmonid species, turned into a reservoir with

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dominant cyprinid species characteristic for lowland waters and reservoirs, where the unplanned stocking played an important role.

Herpetofauna

The formation of the reservoir in the middle of the 20th century by changing the former pond and swamp ecosystems, by regulating and channelling of the river courses that bring water into the lake, and by changing the climate conditions, caused the alteration and structure of the population attributes of the present amphibian and reptile species. The presence of 12 species of amphibians (4 species from the Ichthyofauna

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Among the amphibian and reptile fauna in Vlasina, specific significance has the species Triturus cristatus.

Ornithofauna

Lake Vlasinsko was formed in the place of the once well-known Vlasina peat bog – the largest peat bog area in Serbia, by many features unique for its significance for the ornithofauna. Particularly valuable is the ornithofauna of the peat bog, swamps, and wet meadows, as well as the numerous migratory bird species that use the large water surface of the lake to rest and feed during the spring, autumn, and winter months. Around 125 species of birds were recorded on Lake Vlasinsko.

The grey heron (Ardea cinerea) and cormorant (Phalacrocorax carbo) nest in Vlasina, and this is the highest altitude in Serbia where these two species have a nesting colony.

The ornithofauna of the peat bog, swamps, and wet meadows once inhabited the sphagnum peat bog – Vlasinsko Blato. It was distinct for the autochthonous, as well as boreal elements. After the peat bog was

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flooded at the beginning of 1950's in order to form Lake Vlasinsko, this type of the fauna was destroyed. In the formation of the present fauna observed and recorded in 1990-2000, certainly the greatest (negative) role had the transformation of Vlasinsko Blato into the reservoir. The nesting was hindered for many species, while other simply disappeared from the area. This is the case with the last colony of the crane – *Grus grus* in the Balkan Peninsula. Some species started to come and nest in Vlasina only after the lake was formed. In 1977 and 1978, the tufted duck – *Aythya fuligula*, and the little ringed plover – *Charadrius dubius*, which appeared on small sandbanks, were observed to nest for the first time. Wet meadows are the habitat for a stable nesting population of the whinchat (*Saxicola rubetra*) and yellow wagtail (*Motacilla flava*).

Theriofauna

The area of Vlasina represents a mosaic complex of ecosystems that provides favourable living conditions for a large number of mammal species. From the family of shrews, the water shrew and the Miller's water shrew (*Neomys foediens, N. anomalus*) are present. The brown hare (*Lepus europaeus*), red fox (*Vulpes vulpes*), pine marten and beech marten (*Martes martes, M. foina*), polecat (*Mustela putorius*), and badger (*Meles meles*) are also present.

Ecosystem services

Social values

The natural values, the source of water supply, tourism, and other compatible activities represent and will represent the basis for development of this area. There are three settlements in the surroundings of the lake: Vlasina Rid, Vlasina Stojkovićeva, and Vlasina Okruglica. The settlements in this area bear a sign of insufficient development, characteristic for most of the rural mountain areas in Serbia. In the age structure of the inhabitants within the area, the inhabitants aged 50-69 years prevail, and the least percent in all settlements goes to the youngest members (up to 9 years of age). The rapid decrease of the number of inhabitants is present in the settlements around Lake Vlasinsko, and if this trend would continue with the same pace, some settlements would become uninhabited. This unfavourable age structure contribute to the unpleasant picture on development potentials of this area when human resources are concerned — as principal prerequisites of the development. There are 1400 farmer households in the area of Vlasina, where sheep, cattle, and horses are bred.

The studies in this area revealed that before the Slavs came to the plateau of Vlasinsko Blato, Roman, Byzantine, and before them Wallachian settlements existed there. In the second half of the 12th century, the rest of these peoples blended with the Slavs. Only some monuments were preserved, turned into various and unusual figures during time, which can be seen in several abandoned village cemeteries. In the area of the natural asset, the following architectural heritage was recorded:

The spatial cultural-historical unit Mahala Rid is positioned on the western side of the lake, on a hill that dominates the surroundings. The unit probably existed already in the Turkish period, but there are no material traces left except the data that 160 years ago a church was built on older foundations. The objects that make this unique spatial and cultural-historical monumental entity originate from the end of the 19th and in the first half of the 20th century.

Mandžina Mahala represents one of the smaller entities. Two groups of four households with residential and supplementary objects were registered. In opposition to Rid, where elements of the town architecture dominate, the rural architectural elements prevail in this settlement, with the evident effort to make them similar to the urban ambient through vividly coloured facades.

Dojčinova Mahala is positioned to the northwest from the lake. As an ambient unity it deserves a full attention primarily for the compactedness of its rural ensemble, and particularly for the values of some of the objects, from older types of the village house through modifications influenced by the urban architecture, to forms with developed facade plasticity. There is a holy tree ("Zapis") on the eastern access road, a large, centuries old beech with an incised cross, fenced with a short stone wall, and which has a significance of a cult object.

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Groups and individual objects in Dojčinova Mahala have an exceptional documentary value, and as a unity they have an ambient value as well. In Gadžina Mahala there is also a holy tree ("Zapis") with a stone cross.

Current scientific research and facilities:

The area of Vlasina even today represents an exceptional scientific proving ground, on which numerous studies and scientific papers bear witness. Coordinated planning and monitoring of scientific research would result in providing answers to many questions of fundamental importance, directives and practical solutions for the future management of the protected natural asset. At the beginning of 21st century, the Institute for Nature Conservation of Serbia realises extensive, multidisciplinary research necessary for the realisation of the Protection Study for the Landscape of Outstanding Features "Vlasina". The basis for continuation of the research is the Management Programme, which includes the programme for biomonitoring of the complex physicalgeographical environmental conditions of meteorological parameters, pedological characteristics and the regime of ground waters, as well as rare species of flora and fauna; the research and regular monitoring of physical-chemical and biological characteristics of the lake water; the project of monitoring of the primeval nature using the bioindicator organisms (test organisms - vegetation, flora, fauna); the project of determination of the flora inventory; the project of vegetation mapping of the natural asset; the monitoring of the population dynamics of the natural rarities from the Red List of the Fauna of Serbia (with the priority of monitoring the otter, corncrake, and minnow populations); the project of research of the qualitative and quantitative composition of the fauna of the natural asset. In scope of this last project, the faunistic and ecological research of the vertebrate and invertebrate fauna should be planned, as well as specific individual projects on protection of rare species of birds, minnow, and other significant species, and the programme of systematic, complex research of the theriofauna in this area - the inventory of this faunal group and biocoenological research as the basis for implementation of adequate protection measures.

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Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

The Municipality of Surdulica has included the natural values of Vlasina in its tourist offer. In scope of this programme, the promotional material is printed and distributed (posters, leaflets, etc.), which promotes the nature of Vlasina and the necessities for its protection. Ecological programmes are included in the schedule of the manifestation "Vlasinsko Leto" (Vlasina Summer), held on the shores of Lake Vlasinsko, in addition to entertaining and cultural-artistic programmes

Current recreational and tourism:

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The richness of the tourist potential of this unique mountain area, with its natural rarities, is out of step with the inclusion of natural and cultural-historical potentials into the development of the tourism through the tourist offer.

Vlasina is one of the most attractive tourist destinations primarily for its natural features: healthy environment, numerous clear waterways, numerous attractive lookouts, high-montane grass terraces, rich flora and fauna, geographical position, cultural-historical localities, and far from negligible potentials of the lake.

The area of Vlasina offers possibilities for the development of various types of tourism: sport-recreational, medicinal, outing, educational, conference, village, hunting, and fishing. It is suitable both for winter and summer tourism. The presence of specific tourist capacities, such as hotels, restaurants, sport playgrounds, camping sites, facilitates the improvement and planned tourist management. Particularly favourable for the development of the village tourism is the presence of villages that preserved their traditional image, way of life, and customs.

From the infrastructural aspect, the development of tourism supports the presence of a number of tourist object, both in the immediate vicinity of the lake and in the wider surroundings.

There are two hotels near the lake, one motel, six resorts, and two camping sites. In addition to that, there are several annexee buildings and weekend settlements.

Starting from the cited potentials for the development of tourism in Vlasina and the fact that some forms of mass tourism are already developed in this area, there is a need to direct the development towards the sustainable development of the area, primarily through planned programmes of eco-tourism. The negative effects of some forms of the mass tourism, which lead to degradation of the natural environment, can be avoided in this way and the commercial profit increased in the same time.

As principal advantages for the development of tourism in Vlasina, the following can be mentioned:

Natural features that signify highly attractive, representative tourist motifs; ecological values: preserved, quiet, and clean natural environment, rich and diverse ecosystems and rural village milieus; possibilities for development and advantages – for its characteristics Vlasina gained the status of development priority in the tourism of the Republic of Serbia, and as a bordering area it also has a role in encouraging the commercial development and prevention of human migrations. Because of the small number of industrial objects and low level of urbanisation in this area, ecological and tourist development can be planned in the most optimal manner.

In the same time, there are some restrictions and obstacles for the tourist development in the area: unfavourable traffic-tourist position for transitory tourists; poorly inhabited areas and the constant process of depopulation because of which households with old inhabitants prevail, which hinders the source of the necessary workforce for the tourism purposes.

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Threats and responses

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within the site:

Wet habitats were drained in order to create arable land and meadows, and the aquifers are used for water supply.

The most significant changes, the effects of which are felt even today, occurred after April 9, 1949, when the filling of the lake started. The reservoir was formed after the construction of the dam on the place where the River Vlasina flowed out of the peat bog, among people known as "Vlasinsko Blato", so that 2/3 of the former peat bog was covered with water.

Other various factors that act permanently or occur sporadically in the area of Vlasina are the following: fires unintentionally caused by human factor, intentional fires for the needs of cattle breeding, burning of shore vegetation for fishing, extinguishing, mowing, accumulating waste, collecting of particular species for collections, etc.

The peat is also exploited at this location by the factory for peat processing that operates in scope of the furniture factory "Simpo" from Vranje.

One of the important processes that influence the changes of the configuration of the terrain is the alteration of the lake shore belt under the influence of waves and sedimentation, as well as drastic water level changes in the lake. Besides the changes they cause from the geomorphological aspect, these processes lead to a significant stability disturbance of ecological processes in and around the lake.

The ichthyofauna of Lake Vlasinsko is significantly changed in relation to the natural potentials of these waters, due to the introduction of many species that do not belong to this type of lake. Hydrotechnical interventions (formation of the inflow channels, coalescing of creeks and rivulets) by which some rivers were shifted from one watershed to another, which changed the natural boundaries of the watersheds, prevented the natural migratory movements during spawning and the spawning itself. In this way, Lake Vlasinsko, in spite of the water quality that is appropriate for salmonid species, turned into the reservoir in which cyprinid species, characteristic for lowland waters and reservoirs, prevail.

By flooding of the peat bog for the purpose of Lake Vlasinsko formation, the ornithofauna was disturbed and reduced to adaptable species that live in the immediate vicinity of the lake, on floating peat islands, and around some tributaries of the lake. The nesting of many species was prevented, while some simply disappeared. This was the case with one of the last nesting places of the crane – *Grus grus*. In recent times, sport fishing represents one of the most important factors that are threatening the ornithofauna. The fishermen on the shores of the lake are most numerous exactly in June and July, and these period corresponds to the bird nesting season. Frequent movements along the shore and on water, boating, and the noise disturb the birds in the most sensitive period of their life cycle. Redshank and tufted duck were regular nesting birds of the Vlasina peat bog. Due to the more intensive sport fishing and increased disturbances, these species now nest rarely and occasionally. Mowing of meadows is the potential threat factor for the nesting population of the corncrake.

Regarding the herpetofauna and the theriofauna, the basic threat factor is the alteration of the hydrological regime of the entire area and destruction of aquatic ecosystems.

Urban zones are rapidly spreading in all directions for more than half a century, often with unplanned building, and during the last 20 - 30 years in the closest vicinity around the lake, particularly in the northwestern part. Considering the increasing anthropogenic influence in this area, due to the existing infrastructural objects, it is supposed that in the future the problem of habitat threat will be more prominent, particularly regarding the realisation of the planned activities on building.

a) in the surrounding area:

The intensive alteration of the autochthonous landscapes in Vlasina is taking place for more than two centuries. Until that time, these areas were covered by a dense coniferous forest that was destroyed by the development of mining. Beech forests, which were formed afterwards owing to the regression of coniferous forests, are mainly cleared. Forest

thinning and barrening of the terrain lead to erosion that further degrades the surface layer of the soil. The afforestation of barren areas is done with the allochthonous species of trees. Mainly black and white pine, Douglas-fir, and Norway spruce, the monocultures of which can be seen throughout the area, are used for this purpose in Vlasina. The areas under these cultures are becoming of the same size as the areas under beech forests. The exploitation of the medicinal herbs, edible wild plants, and forest fruits, used in different industries, is excessive and uncontrolled. The classic example of the excessive exploitation is that of the blueberry, in the form of inadequate picking and usage of the so-called combs. The intensive and continuing cattle breeding is a factor the negative effects of which reflect both through destruction and alteration of the vegetation and through intensification of the erosive processes. The water erosion represents one of the major factors of the relief modification and threat in this area, in the form of the surface erosion, vertical cutting, and accumulation of the deposits.

Bibliographical references

Ramsar Site: 1738 – Vlasina

- Gavrilović, D. (1917): Mrazno-snežanički oblici u reljefu Karpatsko-Balkanskih planina Jugoslavije (Frost-neve formations in the relief of the Carpathian-Balkan mountains of Yugoslavia). Zbornik radova Geografskog zavoda PMF-a, sv. 17, Beograd.
- Geologija Srbije Tektonika, knj. IV. (*The Geology of Serbia Tectonics, Book IV*). Zavod za regionalnu geologiju i paleontologiju RTF, Beograd 1976. godine.
- Gigov, A., Bogdanović, M. (1963): Tresave i treseti Jugoslavije (*Peat bogs and peats of Yugoslavia*). Zemljište i biljka XIII, 1/3, Beograd.
- Gigov, A, Milić, Č. (1974): Tresave i elementi reljefa (Glas SANU, CCXCII, Odeljenje prirodno- matematičkih nauka, 38), Beograd.
- Grupa autora (1997): Vlasinsko jezero, Hidrobiološka studija (*Lake Vlasinsko a hydrobiological study*). Biološki fakultet, Beograd.
- Stručni nalaz sa rezultatima izvršenog ispitivanja kvaliteta otpadnih voda JP "Đerdap" DP "Vlasinske hidroelektrane" (Expert findings with the results of the waste water quality analysis of the PE "Đerdap" PE "Vlasinske Hidroelektrane"). Institut za kvalitet radne i životne sredine "1. maj" Niš Surdulica, 2002.
- Katić, D. (1910): Vlasinska tresava i njezina prošlost (*The Vlasina peat bog and its past*). Spomenica SKA, LXXV, Beograd.
- Košanin, N. (1910): Vlasina. Biljno-geografska studija (*Vlasina a phytogeographical study*). Glas SKAN, LXXXI, Beograd.
- Maletin, S., Đukić, N., Miljanović, B., Teodorović, I. (1998): Contribution to the knowledge of the ichthyofauna of the Vlasina reservoir, ICHTYOLOGIA, Vol. 30, No.1, 83-85.
- Matvejev, S. (1950): Rasprostranjenje i život ptica u Srbiji (*Distribution and life of the birds in Serbia*). Srpska akademija nauka, posebna izdanja, 161, Inst. za ekologiju i biograografiju 3, Beograd.
- Matvejev, S., Vasić, V. (1973): Catalogus faunae Jugoslaviae 4/3 Aves, Consilium academiarum scientiarum Rei Publicae Socialisticae Federativae Jugoslaviae, Academia scientiarum et artium Slovenica, Ljubljana.
- Meteorološko-klimatske podloge za planiranje, projektovanje, izgradnju i održavanje objekata na turističkom centru Vlasina (Meteorological-climate basis for planning, projecting, constructing, and maintaining objects in the tourist center Vlasina). Zavod za urbanizam i komunalnu delatnost Srbije, Beograd 1990. godine.
- Milić, Č. (1967): Dolinska morfologija u gornjem i srednjem toku Južne Morave (*The valley morphology in the upper and the middle course of the River Južna Morava*). Zbornik radova GI "Jovan Cvijić", 21, SANU, Beograd.
- Milovanović, D., Živković, A. (1956): Limnološka ispitivanja baražnog jezera na Vlasini (*The limnological research of the reservoir Vlasinsko*). Zbornik radova instituta za ekologiju i biogeografiju SANU, Beograd.
- Popović, I. B. (1977): Jedan pogled na pitanje turističke valorizacije geografskog položaja Vlasinskog jezera (A view onto the tourist valorisation of the geographical position of Lake Vlasinsko). Leskovački zbornik, Leskovac

- Predeo izuzetnih odlika Vlasina. Studija zaštite (A Landscape of Outstanding Features Vlasina. Protection Study). Zavod za zaštitu prirode Srbije, Beograd 2004. godine
- Rakićević, T. (1964): Prilog poznavanju obrazovanja obala Vlasinskog jezera (A contribution to the shore formation of Lake Vlasinsko). Zbornik radova Geografskog zavoda PMF-a, sv. XI, Beograd.
- Ružić, A. (1966): Pregled faune Micromammalia bivše Vlasinske tresave i njene uže okoline (*A review of the micromammalian fauna of the former Vlasina peat bog and its close surroundings*). Vranjski glasnik, 2/66, 349-355. Vranje
- Savić, I., Paunović, M., Milenković, M., Stamenković, S. (1995): Diverzitet faune sisara (Mammalia) Jugoslavije, sa pregledom vrsta od meñunarodnog značaja (Diversity of mammals of Yugoslavia with a review of internationally significant species). In: Stevanović, V., Vasić, V. (eds): Biodiverzitet Jugoslavije sa pregledom vrsta od meñunarodnog značaja (Biodiversity of Yugoslavia with a review of internationally significant species). Biološki fakultet i Ekolibri, Beograd.
- Studija za prostorni plan Zaštita prirode područja Vlasine (A study for the spatial plan protection of the nature in the area of Vlasina). Zavod za zaštitu prirode Srbije, Beograd 1992. godine.
- Tesić, Ž., Gigov, A., Bogdanović, M., Milić, Č. (1979): Tresave Srbije (*Peat bogs of Serbia*). Zbornik radova SANU GI. "Jovan Cvijić", 31, Beograd.
- Urbanistički plan turističko-rekreativnog područja Vlasinskog jezera, knjiga I i II (*Urbanistic plan for the tourist-recreational area of Lake Vlasinsko, Book I and II*). Zavod za unapreñenje komunalne delatnosti, Beograd 1971.
- Vodoprivredna osnova Republike Srbije (Water Management Plan of the Republic of Serbia). Institut za vodoprivredu "Jaroslav Černi" Beograd, 2001.
- Zeremski, M. (1977): Kriogeni procesi pleistocenske periglacijalne klime (*Cryogene processes of the Pleistocene periglacial climate*). Zbornik radova GI "Jovan Cvijić", SANU, knj. 29, Beograd