

P R E D G O V O R

Na svojoj IV sednici, održanoj u Parizu od 1. do 6. septembra 1980. god., Komitet za Svetsku baštinu Organizacije ujedinjenih nacija za obrazovanje, nauku i kulturu (UNESCO) doneo je jednoglasnu odluku da se *Nacionalni park Durmitor* unese u spisak SVETSKE PRIRODNE I KULTURNE BAŠTINE.

Ova je odluka doneta na osnovu konvencije, prihvaćene od Generalne skupštine UNESCO-a 1972. godine, prema kojoj: »...kulturalna i prirodna dobra koja imaju neprocenjivi značaj, izuzetno su dragocena, imaju univerzalnu vrednost, čine jedinstvenu i nezamenljivu kulturnu i prirodnu baštinu ne samo pojedine nacije nego i čitavog čovečanstva, predstavljaju svetsku baštinu... te zaslužuju da budu i posebno zaštićena od različitih opasnosti koje im prete«.

Time je odati najveće priznanje međunarodnih razmera jednom od bisera u džerdanu prirodnih lepota naše zemlje.

Pre toga, u samoj našoj zemlji, značaj Durmitora, kao posebnog prirodnog, a ujedno i kulturno-istorijskog spomenika, istaknut je time što je Durmitor proglašen za nacionalni park zakonom, koji je izglasan u skupštini NR Crne Gore 1952. god.

Odluke o proglašenju Durmitora nacionalnim parkom i o njegovom unošenju u spisak Svetske kulturne i prirodne baštine ne treba da nas začudi. Ko je imao prilike da poseti ovu planinu, jedinstvenu po mnogo čemu, da prolazi njenim šumama, da se ogleda u njenim jezerima — »gorskim očima«, da ide njenim stazama i da se penje na bezbroj njenih vrhova — na »soe nebeske«, morao je da joj se divi i da je zavoli.

Na Durmitor, stoga, od davnina hrle planinari, turisti, ljubitelji prirode, obični putnici, a pogotovo naučni radnici. Dug je spisak opisa boravaka na Durmitoru koji su ostavili za sobom njegovi mnogobrojni posetioci, podstaknuvši nove posete. Isto tako, o Durmitoru su objav-

ljena mnogobrojna dela geografa, geologa, hidrologa, meteorologa, etnologa, stručnjaka za kulturno-istorijske spomenike, biologa i drugih koji su ispitivali ovo područje. Durmitor, sa svim što sadrži i što predstavlja, neodoljivo je delovao na sve one koji su čuli za njega ili ga, makar i jednom, posetili. Velik je broj, naročito naših, poznatijih naučnika, počevši od Pančića i Cvijića, koji su posetili Durmitor, s ciljem da ga ispituju i opišu. Ovamo su dolazili i mnogi strani istraživači, a ne samo putnici i turisti.

Međutim, kada je reč o Durmitoru, turističkom objektu, Nacionalnom parku i biseru Svetske baštine, može se uočiti da je težište dato njegovim prirodnim lepotama. Kada se ističu osobenosti njegove prirode, onda se navode podaci o reljefu, geološkoj prošlosti i geološkom sastavu, o tragovima glacijacija, o nadzemnim i podzemnim vodama, pećinama i jamama, o kanjonu Tare, koji se, po dužini i dubini, stavlja uz bok Koloradu, i još o mnogim drugim lepotama koje krase ovu planinu. Sve je to ispitano i prikazivano, o tome ima podataka, koji se navode u mnogobrojnim radovima.

No, kada je reč o živom svetu Durmitora, treba istaći da se o biljnom carstvu ove planine ponegde još i govori, jer su flora i vegetacija relativno dobro proučene ili bar proučavane. Nasuprot tome, životinjski svet tog područja malo je poznat. Autori članaka i studija o Durmitoru, kada pišu o fauni, većinom se ograničavaju na lovnu faunu, jer drugih podataka i nema. Čak i u obrazloženju namenjenog UNESCO-u, prilikom podnošenja predloga za uvrštenje Durmitora u spisak Svetske baštine, o njegovoj fauni nije moglo mnogo da se kaže, jer predlagači o tom pitanju nisu mogli da nađu nikakvu dokumentaciju. Istakli su jedino da fauna insekata nije dovoljno ispitana, a to se odnosi na mnogobrojne, ako ne i na većinu drugih životinjskih grupa Durmitora. Ono malo podataka što je do sada prikupljeno o fauni ove planine, rezultat je rada izvesnog broja istraživača, i nije sređeno, te je nedostupno zainteresovanoj javnosti.

Ali, živi svet ove najviše dinarske planine (svet koji je, istina, nedovoljno proučen, a još manje poznat široj javnosti, koja se toliko interesuje za Durmitor, divi mu se i posećuje ga) predstavlja — kao i njegovo stenje, njegove vode, visovi, kanjoni i jezera — nerazdvojni deo tog izuzetnog prirodnog objekta.

Zadatak je biologa, njihovih organizacija i institucija — našeg društva u celini da, uz aktivno angažovanje Nacionalnog parka »Durmitor«, porade na otklanjanju pomenutih nedostataka. Uostalom, svest o tome već se javlja i odgovarajući apeli već su upućeni našoj javnosti. Tako prof. dr Vilotije Blečić i dr Vukić Pulević, u studiji »Nacionalni park Durmitor«, osnovi programa razvoja (Titograd, 1979), pišući o flori Durmitora, ističu (str. 50): »Sazreli su uslovi i prilike da se durmitorska flora i vegetacija detaljnije istraže i da se u tom pogledu sačini jedna monografska studija«, pa dodaju, sasvim u duhu teze koju zastupamo u ovim redovima: »...kada se ova potreba označava, ima se u vidu značaj ove veoma markantne planine sa biljno-geo-

grafskog aspekta, s jedne strane, i značaj Durmitora kao nacionalnog parka, s druge strane«. A u kojoj meri se radi o aktuelnom zadatku, proizilazi iz sledeće opaske istih autora (str. 51): »...o flori Durmitora postoje samo fragmentarni podaci... Iz tih razloga uvijek je teško i nezahvalno floristički karakterisati Durmitor i u tom smislu davati neke preciznije zaključke«.

Ono što je ovde rečeno o flori i vegetaciji Durmitora, još u većoj meri odnosi se na faunu Durmitora.

Stoga se očigledno nameće zaključak da se ne može prihvatiti sadašnje stanje nedovoljne istraženosti živog sveta Durmitora. Ne možemo se pomiriti sa činjenicom da je naše sadašnje znanje o Durmitoru, kao nacionalnom parku i biseru svetske baštine, nepotpuno i jednostrano.

Jugoslovensko entomološko društvo, uočivši ovo nepovoljno stanje, odlučilo je da Crnogorskoj akademiji nauka i umjetnosti predloži da, u okviru svog projekta o proučavanju prirode i prirodnih bogatstava Crne Gore, prihvati plan o sistematskom i organizovanom proučavanju živog sveta ove planine u cilju izdavanja MONOGRAFIJE O FLORI I FAUNI DURMITORA. Jugoslovensko entomološko društvo primilo je ujedno na sebe obavezu, ukoliko se osiguraju potrebna finansijska sredstva, da obezbedi odgovarajuće priloge za onaj deo Monografije koji se odnosi na entomofaunu i da za taj poduhvat zainteresuje stručnjake i iz domena drugih životinjskih grupa kako bi se ovom istraživačkom akcijom obuhvatila celokupna fauna Durmitora. Predlog Jugoslovenskog entomološkog društva dostavljen decembra 1979. godine, Crnogorska akademija nauka i umjetnosti rado je prihvatila.

Zahvaljujući sredstvima koja je odobrila Republička samoupravna interesna zajednica za nauku SR Crne Gore, kao i sredstvima same Akademije, u toku leta 1980. započeta su predložena sistematska faunistička istraživanja.

Posle svega četiri godine rada Jugoslovensko entomološko društvo je u mogućnosti da Crnogorskoj akademiji nauka i umjetnosti i domaćoj i inostranoj zainteresovanoj javnosti preda prve priloge o fauni Durmitora. Značajno je pri tome da se prilozi koje sadrži ova prva sveska o FAUNI DURMITORA ne ograničavaju na insekte, jer su njima obuhvaćeni i mekušci ove planine. Jugoslovensko entomološko društvo nada se da će, zahvaljujući moralnoj i materijalnoj podršci na koju je dosada nailazila započeta akcija, koja je, s obzirom na samu prirodu tematike, dugoročnog karaktera, naš poduhvat moći da se nastavi i da se tako sledeći prilozi sukcesivno pripremaju i objavljuju.

Zajednička akcija Jugoslovenskog entomološkog društva i Crnogorske akademije nauka i umjetnosti, započeta pre četiri godine, a koju treba nastaviti još tešnjom saradnjom sa svim organizacijama zainteresovanim za Nacionalni park »Durmitor«, ima svoju predistoriju. Prethodile su joj organizovane akcije u kojima su učestvovali entomolozi iz raznih krajeva Jugoslavije, kao i odgovarajuće organizacije, naročito iz Crne Gore.

Tako me je s jeseni 1953. godine dr Steva Nikolić, profesor Poljoprivrednog fakulteta u Zemunu, koji je znao da sam po raznim krajevima Jugoslavije proučavao insekte, zapitao da li bih imao kakav prilog o insekatskoj fauni sa teritorije Crne Gore. Naime, tadašnje Naučno društvo Crne Gore odlučilo je da izdaje ZBORNIK i traži priloge za njega. Odgovorio sam da ne raspolazem sa dovoljno materijala iz Crne Gore, gde sam, radi skupljanja insekata, boravio svega jednom, 1935. godine na Komovima, ali bi se, uz finansijsku pomoć, mogla da organizuje akcija proučavanja insekatske faune sa područja Crne Gore. Predložio sam, ujedno, da bi ova proučavanja trebalo ograničiti na neku manju teritoriju i da bi u tom pogledu najbolje odgovarala planina Durmitor, koja je izuzetno interesantna kao prirodni objekt, a isto tako i po svojoj flori i fauni. Uz to, Durmitor je, upravo iz navedenih razloga, bio proglašen za nacionalni park. Ideja je prihvaćena. Zahvaljujući sredstvima Službe za zaštitu bilja iz Titograda, na Durmitoru je od 10. do 23. jula 1954. godine boravila manja ekipa entomologa: G. Nonveiller i J. Stančić, iz Beograda, te Sl. Mrkić iz Nikšića. Tokom ove prve organizovane entomološke posete Durmitoru došlo se, međutim, do zaključka da bi za proučavanje insekatske faune ovog prostranog planinskog područja bilo neophodno da se organizuje entomološka akcija širih razmera, u kojoj bi učestvovao veći broj stručnjaka. Ideja je uspela da se ostvari 1958. god. U odsustvu druge, pogodnije organizacije u tom periodu, Sekcija za faunistiku Društva za zaštitu bilja Srbije (osnovana za tu posebnu priliku) organizovala je dvonedeljnu međunarodnu entomološku ekskurziju na Durmitor, od 25. juna do 7. jula.

Na Durmitoru su tada boravili:

Breljeh Savo (*Mallophaga*, Ljubljana),
 Cernelutti Jan (*Lepidoptera*, Ljubljana),
 Čingovski Jonče (*Symphyta*, Skoplje),
 Gogala Matija (*Heteroptera*, Ljubljana),
 Janković Ljubodrag (*Cicade*, Beograd),
 Michieli Štefan (*Lepidoptera*, Ljubljana),
 Nonveiller Guido (*Halticinae*, Beograd),
 Pretner Egon (*pećinska fauna*, Postojna),
 Stančić Jovan (*Coleoptera*, Beograd) i
 Vasić Konstantin (*Noctuidae*, Beograd).

Na Durmitor je pozvan i nestor naše entomologije Petar Novak iz Splita, koji je tada imao 79 godina. Članovi ekipe bili su i inž. Boris Todorovski (Makedonija) i inž. Radojica Jovanović (Kruševac), koji su se u to doba nalazili na specijalizaciji iz entomologije u Beogradu. Poziv za učešće upućen je i drugim, malobrojnim entomolozima koji su se tada u nas bavili faunistikom i taksonomijom, ali oni nisu mogli da se odazovu. Tako je prof. Zdravko Lorković poslao čak iz New Yorka dopisnicu organizatorima ekskurzije u kojoj se izvinjava što ne može da joj se pridruži, ali nudi svoju saradnju

prilikom obrade materijala jer je sam već u dva navrata, 1949. i 1956, bio na Durmitoru i sakupio lep broj vrsta leptira. Zbog velikog interesovanja koje je među inostranim entomolozima uvek vladalo za proučavanje insekatske faune naše zemlje, kao i zbog oskudnog kadra kojim je Jugoslavija raspolagala u to doba na polju taunističkih istraživanja, na saradnju su pozvani i stručnjaci iz inostranstva. Po četvorica entomologa iz praškog i budimpeštanskog muzeja odazvali su se pozivu prof. dra Svetislava Živojinovića, tadašnjeg predsednika Društva za zaštitu bilja Srbije. To su bili: dr Zoltan Kaszab (*Coleoptera*), dr Laslo Gozmany (*Microlepidoptera*), dr Ferenc Mihalyi (*Diptera*) i dr Vilmos Szekessy (*Staphylinidae*) iz Budimpešte, te dr Josef Mařan (*Carabidae*), dr Ludvik Hoberlandt (*Hemiptera*), dr Jiri Dlabola (*Homoptera*) i dr Zdeněk Bouček (*Hymenoptera*) iz Praga.

Iduće, 1959, godine nije uspjelo da se obezbede sredstva za nastavak započete akcije proučavanje insekatske faune Durmitora. Samo sam ja, potpomognut od strane inž. R. Jovanovića, mog čestog saradnika u entomološkim ekskurzijama po Jugoslaviji, posetio Durmitor u toku jedne nedelje, u mesecu julu, radi proučavanja interesantnog problema »retkosti« planinskih buvača.

Otada, do navedenog predloga Crnogorskoj akademiji nauka i umjetnosti, nastupio je duži prekid u organizovanim akcijama proučavanja entomofaune Durmitora. Samo je Slovenska sekcija Jugoslovenskog entomološkog društva leta 1971. organizovala 14-dnevnu istraživačku ekskurziju na Durmitor, u kojoj je učestvovalo 28 entomologa i studenata biologije.

Akcija Jugoslovenskog entomološkog društva i Crnogorske akademije nauka i umjetnosti pokrenuta 1980., po dobijenim rezultatima, koji se u prvoj svesci o FAUNI DURMITORA predaju javnosti, potpuno je opravdala očekivanja organizatora.

Entomolozi Jugoslavije spremno su se odazvali pozivu svoje organizacije za učešće u jednom poduhvatu značajnom ne samo za bolje upoznavanje faune Durmitora već i za nauku uopšte. Na istom poslu i iz istih pobuda pridružili su im se i stručnjaci drugih taksonomskih grupa. Time što je Durmitor uvršten u spisak Svetske baštine, domaća i inostrana naučna javnost neminovno će još više obratiti pažnju na ovu planinu, na sve ono što nju krasi i karakteriše, pa bi uočila i praznine u našem znanju o živom svetu Durmitora, koje se sada, zahvaljujući započetoj akciji, sistematskim radom popunjava. Na zajedničkom poslu, od opšteg interesa, okupili su se entomolozi i drugi stručnjaci (faunisti) iz cele naše zemlje. Osim toga, tamo gde priroda tematike to zahteva, a raspoloživi kadar omogućuje, obrazovani su timovi koji zajednički obrađuju određene životinjske grupe. Time će postavljeni zadatci moći znatno brže da se izvrše, a izabrana tema da se obradi svestranije nego što bi to pojedincu, zbog nedostatka vremena, raspoloživog materijala, ili iz drugih objektivnih razloga, bilo moguće. Boraveći u različito doba godine na terenu, članovi ovih

timova mogu, rasporedivši svoje vreme, da obuhvate faunu tokom celog vegetacionog perioda, što bi pojedincu teško bilo moguće, tim pre što proučavanje faune Durmitora nikom od njih nije jedini zadatak. Na taj se način članovi timova međusobno dopunjuju i pomažu, koristeći se iskustvom, kao i materijalom, prikupljenim sa terena. Usled svega navedenog, rezultati zajedničkog rada su veći i značajniji nego što bi to pojedincu bilo moguće da postigne u istom roku.

Celom akcijom rukovodi poseban Organizacioni odbor izabran na IX godišnjem skupu entomologa Jugoslavije, održanom septembra 1980. godine u Ohridu, u sastavu prof. dr Guido Nonveiller (Beograd) predsednik, mr Velizar Velimirović (Titograd), dr Jan Carneletti (Ljubljana) i dr Rizo Sijarić (Sarajevo).

U cilju pravilnog obaveštavanja javnosti i odavanja priznanja učesnicima poduhvata, treba istaći da su za ovaj rad odobrena krajnje skromna sredstva i da se naša proučavanja finansiraju izvan svih normi na kojima se danas u nas zasnivaju istraživačke delatnosti. Mnogi stručnjaci pri tome za dolazak i boravak na terenu koriste bez nadoknade svoje vozilo, vrlo često za vreme godišnjeg odmora, dok su drugi u svojim radnim organizacijama naišli na više razumevanja za svoj rad na Durmitoru, pa su, pored ostalog, mogli da se služe njihovim kolima a u nekim slučajevima one su čak delom ili u celini pokrivale troškove terenskog rada. Tako je Biološki institut Slovenske akademije znanosti i umjetnosti iz Ljubljane do sada iz svojih sredstava snosio sve izdatke skoro za sve svoje mnogobrojne stručnjake koji su učestvovali u proučavanju faune Durmitora, postajući tako sufinansijer našeg Projekta.

Stručnjacima je omogućeno, osim toga, da, po svom izboru, na Durmitoru povedu jednog do tri saradnika, izabrana među studentima i drugim omladincima i omladinicama, koji su već donekle upućeni u rad na prikupljanju insekata, što je doprinelo da je učinak boravka naučnih radnika na terenu znatno uvećan.

Istraživački rad odvijao se 1980. godine, u četiri smene po dve nedelje — od 25. juna do 29. avgusta. Učestvovalo je 16 naučnih radnika i 38 omladinki i omladinaca, većinom članovi pokreta »Mladi istraživači«, od kojih je polovina bila iz Titograda. U 1981. godini takođe su bile organizovane četiri smene, od 29. juna do 31. avgusta, učestvovala su 24 entomologa i 23 saradnika koji su na terenu ukupno proveli 380 dana. Svi su, 1980. godine, bili smešteni u hotelu »Durmitor« koji je Organizacionom odboru stavio na raspolaganje jednu veliku i svetlu prostoriju za uspostavljanje privremene entomološke laboratorije, sa potrebnom opremom. Od godine 1981. stručnjaci istraživači i njihovi saradnici smešteni su u Odmaralištu »Ribnica« u Žabljaku. U 1982. godini terenski rad je započeo znatno ranije i trajao je duže, pri čemu je jedna smena smanjena na po 10 dana. Od 12. aprila do 20. oktobra na Durmitoru su, u 10 smena, boravila 23 stručnjaka i 21 saradnik, provevši na terenu 550 dana. Uprava Odmarališta u svemu je izlazila u susret Organizacionom odboru i učesnicima akcije, pa je

dodijelila i jednu manju prostoriju za poljsku laboratoriju. Sličnih razmera je bila aktivnost i u sledećoj, 1983. godini. Od 19. marta, tj. ranije nego prethodnih sezona, pa do 30 avgusta na terenu je boravilo 22 stručnjaka i 19 saradnika, ukupno 41 učesnik u našoj akciji. Oni su proveli 483 dana na terenu.

U prvim priložima o FAUNI DURMITORA — rezultat dosadašnjeg rada na proučavanju živog sveta ove planine — prikazanim u ovoj svesci, izloženi su ne samo rezultati organizovane akcije započete 1980. godine već je u njima sabrano i obrađeno i sve ono što je ranije bilo objavljeno od autora ili drugih ili što se nalazilo pohranjeno u odgovarajućim zbirkama. Proučavanja kod nekih insekatskih ili drugih životinjskih grupa, doduše malobrojnih, početa su još pre skoro sto godina. To je slučaj, na primer, sa *Rhopalocera* i *Carabida*, prikazanim u ovoj svesci, o čemu svedoče podaci koji se iznose u uvodnom delu odgovarajućih priloga.

Na ovaj način, rezultati proučavanja faune Durmitora naših prethodnika najzad su učinjena pristupačnim nauci i široj javnosti. Pri tome treba ukazati na sledeću, veoma značajnu činjenicu. Organizovan, intenzivan rad tokom protekle tri godine, čak i kod insekatskih grupa koje su i ranije bile predmet relativno intenzivnih proučavanja entomologa, dao je znatno više i značajnije rezultate nego prethodnih sedam decenija. Tako je, recimo, kod porodice *Rhopalocera*, obrađene u ovom prilogu, kako iznose autori, od 130 vrsta koje su danas zabeležene, u protekle tri godine prikupljeno 40 vrsta, tj. skoro jedna trećina, iako je reč o insektima kojima se bavio veći broj entomologa (istini za volju, većina od ovih 40 vrsta potiče iz nižih predela Durmitora, koje su pređašnji istraživači manje posećivali). Od sada pribeležene 132 vrste *Cicindelidae* i *Carabidae* (prikazane u drugom prilogu ove sveske), pre početka naše organizovane akcije bila je poznata svega jedna trećina — 43 vrste.

Na kraju bismo ovaj osvrt na ciljeve, značaj i rezultate akcije proučavanja faune Durmitora hteli završiti jednom preporukom koja je izneta Crnogorskoj akademiji nauka i umjetnosti, a preko Srpske akademije nauka i umjetnosti, i Savetu akademija Jugoslavije. Ona se sastoji u sledećem. Umesto da svaki saradnik na izradi monografije sam ili sa svojim pomoćnicima dolazi na Durmitor, prikupljanje materijala moglo bi da se poveri jednoj *Stalnoj biološkoj stanici* koju bi trebalo organizovati na Žabljaku. Ona bi bila poverena nekom biologu, koji bi imao svoje vlastite istraživačke zadatke i koji bi rukovodio prikupljanjem materijala za ostale stručnjake, uz pomoć stalnog a naročito povremeno angažovanog i osposobljenog ljudstva. Stanica, opremljena najvažnijim priborom, predstavljala bi bazu za rad stručnjaka prilikom njihovog boravka na terenu i sigurno bi doprinela da se sadašnji rad ubrza i unapredi.

Prof. dr Guido NONVEILLER
predsednik
Jugoslovenskog entomološkog društva

P R E F A C E

On its Fourth Meeting, held in Paris from 1—6 September 1980, the Committee for World Heritage of the United Nations Educational, Scientific and Cultural Organization (UNESCO) came to an unanimous decision to include the *Durmitor National Park* into the list of the **WORLD'S NATURAL AND CULTURAL HERITAGE**.

This decision was based on the Convention, accepted by the General Assembly of UNESCO in 1972, according to which: »... the cultural and natural goods whose significance is invaluable, are extremely precious and of universal value, are an unique and irreplaceable cultural and natural heritage not only for a particular nation, but the whole humanity as well, present a World heritage... and therefore deserve to be especially protected from various hazards that might endanger them«.

Thus the highest international tribute has been paid to one of the pearls in the treasury of the natural jewels of our country.

Prior to this, in our country, the importance of Durmitor, as a natural and at the same time as a cultural and historical monument, was stressed by the fact that it was proclaimed a National Park by the Assembly of the Republic of Montenegro in 1952.

The decision to proclaim Durmitor a National Park and to include it in the list of the World's Cultural and Natural Heritage is not surprising. Whoever has had the opportunity to visit this mountain, unique in many aspects, to wander through its forests, to gaze at the reflections in its lakes — »the eyes of the mountain«, to roam its paths and climb its many peaks — »the heavenly posts«, just had to admire it and to be fond of it.

Therefore, Durmitor has always been visited by alpinists, tourists, nature lovers, common visitors and especially by scientists. There is a long list of descriptions of Durmitor left by its visitors, inciting yet more visits. Similarly, countless reports made by geographers, geologists, hydrologists, meteorologists, ethnologists, experts for cultural-historical monuments, biologists and others who have heard of it or have visited it, even only once. Very many famous scientists, especially Yugoslav, starting with Pančić and Cvijić, have visited Durmitor to examine and describe it. Not only foreign visitors and alpinists, but also many scientist have come here.

However, when Durmitor is concerned, as touristic place, National Park or as a pearl of the World's Heritage, it is evident that the main focus is put on its natural beauties. When the characteristics of its nature are pointed out, then generally are mentioned data concerning relief, geological past and geological structure, traces of glaciation, surface and underground waters, caves and pits, the Tara canyon, which is compared with the Colorado canyon in length and depth, and the many other wonders which enhance this mountain. All these have been examined and presented in numerous papers.

And yet when plants and animals of Durmitor are concerned, it must be pointed out that the flora of this mountain is mentioned in a certain measure, for the flora and vegetation have been studied relatively thoroughly, or at least attempts have been made for it. On the contrary, the fauna of this area is little known. When the authors of studies on Durmitor write about its fauna, they mostly limit their subject to the game fauna, since there are no other data available. Even in the proposal submitted to UNESCO to include Durmitor in the list of World's Heritage, very few could be said about its fauna, because of the lack of necessary documentation. It was emphasized only that the insect fauna hadn't been studied sufficiently, what could also be said for all other animal groups of Durmitor. The few data collected so far on the fauna of this mountain represent the result of studies carried out by a limited number of scientists; these data haven't yet been compiled and therefore are not available for a large public.

However, plants and animal life of Durmitor, this highest Dinaric mountain, present, together with its cliffs, waters, mountain peaks, canyons and lakes an integrated part of this unique place.

Therefore it is an obligation of biologists, their organisations and concerned institutions, as well as of our community in general, with the active engagement of the Committee of the Durmitor National Park, to eliminate this gap. Some initiatives in this direction have already been undertaken to attract the attention of our public on this matter. Thus, professor Dr. Vilotije Blečić and Dr. Vukić Pulović, in »The Durmitor National Park, an Elementary Development Program« (Titograd, 1979), writing on the Flora of Durmitor (p. 50), pointed out: »The conditions and situation are ready for a detailed study of the flora and vegetation of Durmitor and for a monograph study« and they added, quite in accordance with the above mentioned »When we point out this necessity, we have in mind the importance of this beautiful mountain from the phyto-geographical aspect, from the one side, and the importance of Durmitor as a national park, from the other«. It is evident from the following lines of the same authors how acute this problem is (p. 51): »... there are only fragmentary data on the flora of Durmitor... and it is always difficult and ungrateful to characterize the floristical aspects of Durmitor and to come to any precise conclusion in this respect«.

All what has been said here about the flora and vegetation of Durmitor is even more pertinent to its fauna.

It can obviously be concluded, therefore, that the above discussed present situation concerning information on plant and animal life of Durmitor cannot be accepted. We cannot be agreed with the fact that our now existing knowledge about Durmitor, as a National Park and a Pearl of the World's Heritage, is incomplete and one-sided.

The Yugoslav Entomological Society, having become aware of this, has decided to propose to the Academy of Sciences and of Arts of

Montenegro a plan of a systematic and organized investigation of this mountain in order to publish a MONOGRAPH ON THE FLORA AND FAUNA OF DURMITOR. At the same time, the Society has agreed to prepare corresponding contributions for the part of the monograph dealing with the insect fauna, provided that the necessary funds for field work are granted, and to incite the interest of experts of other animal groups, in order to include the whole fauna of Durmitor in these investigations. This proposal have been submitted in December 1979, and it was readily accepted.

As funds were granted by the Community for Scientific Research of the Socialistic Republic of Montenegro, as well as by the Academy of Sciences and Arts of Montenegro, investigations of the fauna of Durmitor on a large scale were begun in the summer of 1980.

After only four years of research the Yugoslav Entomological Society is in the position to present the first contributions on the fauna of Durmitor to the Academy of Sciences and Arts of Montenegro and to the Yugoslav and foreign public. At the same time it is important that the data presented in this first part of THE FAUNA OF DURMITOR are not limited to insects, but include the Mollusca of this mountain too. The Yugoslav Entomological Society hopes that the moral and material support will be continued in the futur to this work, initiated few years ago and which is of a long term nature, and which will enable the successive presentation of following parts of THE FAUNA OF DURMITOR.

The joint action of the Yugoslav Entomological Society and the Academy of Sciences and Arts of Montenegro, which began four years ago, has its history. It was preceded by different undertakings with the participation of entomologists from various parts of Yugoslavia, as well as of corresponding organizations.

Thus in the autumn of 1953, Dr. Steva Nikolić, a professor at the Faculty of Agriculture in Zemun, knowing that I had studied insects in different parts of Yugoslavia, asked me whether I might have any contribution on the insect fauna from the territory of Montenegro. Namely, The Scientific Society of Montenegro of that period had decided to publish »COLLECTED PAPERS« and was looking for contributions. I replied that I did not have sufficient material from Montenegro, where I had been only once, in 1935, at Komovi mountain, to collect insects. But I proposed that investigations on the insect fauna of Montenegro could be organized if the necessary funds could be granted. At the same time, I suggested that these investigations should be limited to some smaller area and that the Durmitor Mountain would be most suitable, which is not only an extremely interesting natural place, but especially due to its specific flora and fauna. Furthermore, this was the very reason why Durmitor had just been proclaimed a National Park. The idea was accepted. The Plant Protection Service from the Ministry of Agriculture from Titograd supplied necessary funds and a small group of entomologists organized from 10 to 23 July 1954 a two-weeks excursion to Durmi-

tor. Members of the group were: G. Nonveiller and J. Stančić from Belgrade, and Sl. Mrkić from Nikšić. However, during this first visit to Durmitor it was realized that it would be necessary to organize large scale entomological investigations, with a greater number of scientists, in order to study the insect fauna of this wide mountain area. This idea was accepted and the Section for faunistical researches of the Society for Plant Protection of Serbia organized in 1958 a two-week international entomological excursion to Durmitor, from June 25th to July 7th.

The following entomologists visited Durmitor on that occasion:
Brellich Savo, Ljubljana (Mallophaga)
Carnelutti Jan, Ljubljana (Lepidoptera)
Čingovski Jonče, Skopje (Symphyta)
Gogala Matija, Ljubljana (Heteroptera)
Janković Ljubodrag, Beograd (Homoptera Auchenorrhyncha)
Michieli Štefan, Ljubljana (Lepidoptera)
Nonveiller Guido, Beograd (Halticinae)
Pretner Egon, Ljubljana (Cave fauna)
Stančić Jovan, Beograd (Coleoptera)
Vasić Konstantin, Beograd (Noctuidae)

The oldest Yugoslav entomologist, Petar Novak, from Split, aged 79, also participated in this excursion on Durmitor. B. Todorovski (Skopje) and R. Jovanović (Kruševac), then on fellowship in Entomology in Belgrade, were also members of the team. Invitations were also sent to the few other entomologists who were working on fauna and taxonomy in Yugoslavia at that time, but they were not able to accept. Thus professor Zdravko Lorković (Zagreb) sent a card from New York, apologizing for not being able to participate and offered his collaboration during the study of the collected material since he had already on two occasions, in 1949 and 1956, visited Durmitor and posses from there a good number of butterflies. Colleagues from abroad were invited to cooperate in these researches; due to the great interest which has always been present among foreign entomologist for the study of the insect fauna of our country, and secondly, as at that time in Yugoslavia there were relatively a small number of entomologists interested in faunistical research. Four entomologists from the Prague Museum and four from the Budapest Museum responded to the invitation of professor Dr. Svetislav Živojinović, President of the Society of Plant Protection of Serbia. They were: Dr. Zoltan Kaszab (Tenebrionidae), Dr. Laslo Gozmany (Microlepidoptera), Dr. Ferenc Mihalyi (Diptera) and Dr. Vilmos Szekessy (Staphylinidae) from Budapest, as well as Dr. Josef Mařan (Carabidae), Dr. Ludwik Hoberland (Hemiptera), Dr. Jiři Dlabola (Homoptera) and Dr. Zdenek Bouček (Hymenoptera) from Prague.

The following year, in 1959, funds for the continuation of the investigations of the insect fauna of Durmitor were not obtained.

I was the only one who visited Durmitor for a week in July in order to study the interesting problem of the »rarity« of alpine flea beetles with the assistance of Eng. R. Jovanović, who often joined me in my entomological excursions through Yugoslavia.

From that time up to the suggestion submitted in 1979 to the Academy of Sciences and Arts of Montenegro there was a long break in the investigations of the insect fauna of Durmitor. Only the Slovenian Section of the Yugoslav Entomological Society organized a 14-days research excursion to Durmitor in the summer of 1971, with the participation of 28 entomologists and students of biology.

The results of the study of the fauna of Durmitor, initiated in 1979, and presented herewith in this first Part of THE FAUNA OF DURMITOR, fully justified the purposes of the organizers.

The Yugoslav entomologists have responded aegerly to the invitation of their Society to participate in a project which is important not only for the better knowledge of the fauna of Durmitor, but for sciences in general. Scientists interested in the study of other animal groups have joined them in the same task. By including Durmitor in the list of the World's Heritage, the domestic and foreign scientific community will certainly pay attention to this mountain and to all that what adorns and characterizes it. Thus they will notice our incomplete knowledge concerning plants and animals of Durmitor, which will now be completed by a systematic work, thank to our initiative. Entomologists and other students from all parts of our country have gathered together to work on this project of a common interest. Furthermore, where the subject matter requires it, and the available staff makes it possible, teams have been formed with the purpose to study certain animal groups jointly. Team work will give quicker results and give the possibility to study the same taxonomic group more thoroughly than individuals could do it, due to shortage of time, available material, or other reasons. Furthermore, by visiting the field at different periods of the year, the members of the team, through an adequate distribution of their time, can observe the fauna of the area during the whole vegetation period what would be hardly possible for the individual. Moreover, team work is recommandable because the investigation of the fauna of Durmitor are not the only scientific project that any of them is in charge. In this way, members of the team complement and help each other, using their experience and material collected in the field. On the basis of all the above, the results of this team-work are greater and of higher importance that it would be possible for an individual to achieve it in the same period of time.

The study of the fauna of Durmitor has been managing by a special Organizing Committee elected at the IX Annual Meeting of the Yugoslav entomologists, held in September 1980 at Ohrid. The members of the Committee are: professor Dr. Guido Nonveiller (Belgrade), president, Velizar Velimirović, M. Sc. (Titograd), Dr. Jan Cernelutti (Ljubljana) and Dr. Rizo Sijarić (Sarajevo).

In order to inform the public correctly and to pay tribute to those taking part in the project, it must be pointed out that minimal funds have been granted for this work and that our investigations are financially supported beyond all the standards on which present research work is based in our country. At the same time, many of the colleagues who took part in the study of the fauna of Durmitor take advantage of their holidays to come to the field, while other have been given more understanding at their institutions for such work. Furthermore it has been made possible that the experts take one to three assistants with them to Durmitor selected by the experts among young people interested in entomology. This increased significantly the effects of the work done on the field.

The investigations in 1980 were conducted in four shifts, two weeks each, from June 25th to August 29th. Sixteen entomologists and 38 young enthusiasts, mostly members of the »Young Researchers Movement«, half of which were from Titograd, took part in this action. The total number of working days as well as data on the following years are given in the here enclosed table:

| Year | Duration of field work | Number of | | | | Number of working days |
|------|------------------------|-----------|---------|------------|-------|------------------------|
| | | shifts | experts | assistants | total | |
| 1980 | 25.06 — 29.08 | 4 | 16 | 38 | 54 | 864 |
| 1981 | 29.06 — 31.08 | 4*) | 24 | 23 | 47 | 380 |
| 1982 | 12.06 — 20.10 | 10 | 23 | 21 | 44 | 550 |
| 1983 | 19.03 — 30.08 | 9 | 22 | 19 | 41 | 483 |

* Duration 10 days each.

In 1980 accomodation were assured at the Hotel »Durmitor« which gave a large room to disposal of the Organizing Committee for installing a field laboratory. From 1981 researchers and their assistants have been staying at the Rest House »Ribnica«, near Žabljak. The Manager of the Rest House was very obliging to the Organizing Committee and to the participants in this action and be also supplied a small room for a field laboratory.

The papers on the fauna of Durmitor — a result of the studies accomplished so far on this mountain, include not only data collected during the investigations initiated in 1980, but also material deposited formerly in various collections as well as information published on the same subject in the past. For instance, investigations on some insect groupes or other animals, were begun even one hundred years ago. This was the case with the Rhopalocera, the Carabidae and the Mollusca included in this part. Information about research carried out in the past are given in the introduction to the respective contributions.

In this way, the results of investigations of the fauna of Durmitor, obtained by our predecessors, have finally become available to a large

extension. At the same time, a very important factor must be pointed out. The work performed in the last four years, has yielded much more and more significant results than that of the past seven decades, even for such groups of insects which were the subject of rather intensive studies, as Rhopalocera are. Of the 130 species belonging to this groupe of insects, so far discussed in this part, 40 species were established during the last three years, i.e. almost a third, although many entomologists in the past had collected and studied butterflies on Durmitor. Frankly, most of these 40 species were collected mainly on the lower parts of the mountain which were less frequently visited by former entomologists. Then, of the 132 species of Cicindelidae and Carabidae presented in the second contribution of this part, only 43 species, i.e. one third, had been known before our organized research begun.

Finally, we would like to finish this review of the aims, importance and results of our investigations of the fauna of Durmitor with a suggestion proposed to the Academy of Sciences and Arts of Montenegro, and through the Serbian Academy of Sciences and Arts to the Council of the Yugoslav Academies too.

The following has been suggested. Instead of every collaborator on the FAUNA OF DURMITOR coming to the mountain, alone or with his assistants, the collecting of material could be entrusted to a *Permanent Biological Station* which should be founded on Žabljak. It would be managed by y biologist who would have his own research projects and who would manage the collecting of insects and other animals for the collaborators on the project, with the assistance of a permanent and occasionally engaged and well trained staff. This station, supplied with the necessary equipment, would represent a basis for the field activities of all those who will come to DURMITOR in order to study its fauna, or other biological problems, and it would doubtlessly contribute to increase effectiveness of the investigations.

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