





*Buljarica wetland*





## GEOGRAPHICAL POSITION



Buljarica is a sea ravine located between Petrovac on the northwest and Sutomore on southeast. In the hinterland is Pastrovacka Gora, dividing the bay from Lake Skadar, the largest fresh water basin in the Balkans. This is a rural area with underdeveloped infrastructure and virgin nature. It also has the longest beach on the Budva Riviera, 2,200m long, behind which lies a diluvial ravine. One of the very last, genuine ancient Mediterranean oak forests, containing *Quercus pubescens* and *Fraxinus oxycarpa*, is located there. There are several villages and campsites along the edge of the ravine. Cow and goat-breeding is the main occupation of villagers and thus they use the dry meadows for grazing. In winter the lakes of Buljarica are used for hunting, mainly birds.

### HOW TO ARRIVE

BY CAR, ONE CAN REACH BULJARICA FROM FOUR DIRECTIONS:

By road Bar - Budva, 25 kilometers from Bar

By road Podgorica - Buljarica, via Paštrovačka gora, 55 km

By road Podgorica - Budva, via tunnel Sozina, 53 km

By road Budva - Bar, 16 km

BULJARICA		Površina / Surface	300 ha
E	18°58'19.77"	Obala / Coast	2.2 km
N	42°11'26.62"	Dubina / Max depth	1,40 m

## POLOŽAJ



Buljarica predstavlja morskouvalu koja se nalazi između Petrovca na sjeverozapadu i Sutomora na jugoistoku. U zaleđu se nalazi Paštrovačka gora koja odvaja ovaj zaliv od Skadarskog jezera, najvećeg slatkovodnog basena na Balkanu. Ovo je ruralno područje sa još uvijek nerazvijenom infrastrukturom i netaknutom prirodom. Buljarica je ujedno i najduža plaža na Budvanskoj rivijeri, duga oko 2200 m, iza koje se pruža poplavna uvala. U njoj se nalazi jedna od posljednjih izvornih, očuvanih i stoljetnih mediteranskih šuma hrasta *Quercus pubescens* i jasena *Fraxinus oxycarpa*. Po obodu uvale danas postoji nekoliko sela i zapuštenih kampova. Gajenje krava i koza glavno je zanimanje seljana koji nepoplavljene livade Buljarice koriste za ispašu stoke. Tokom zime jezera Buljarice se koriste za lov, uglavnom na ptice.

## KAKO DOĆI

DO BULJARICE SE DOLAZI IZ ČETIRI PRAVCA AUTOM:

Putem Bar - Budva, na 25 kilometata od Bara

Putem Podgorica - Buljarica, via Paštrovačka gora, 55 km

Putem Podgorica - Budva, via tunel Sozina, 53 km

Putem Budva - Bar, 16 km

## MORE INFORMATION - VIŠE INFORMACIJA

<http://www.birdwatchingmn.org>

<http://www.tob.cg.yu>

<http://www.morskodobro.com>

## *Nature protection*

Buljarica beach has been protected since 1968 as an area with special natural characteristics. This status is given to only 4 ha of the beach as a habitat of xenomorphic and halophyte vegetation. In 1968, when protected area status was conferred, there was no sufficient data on other segments of flora and fauna. In early 2006, it obtained “Emerald” status under the Bern Convention as a unique, pristine habitat on the Adriatic coast, rich in biodiversity, wild flora and fauna.

In 2007 it was declared an Important Bird Area (300 ha), primarily as a breeding, wintering and resting place during the spring migration of birds coming from Africa via the Adriatic. Buljarica complies with three of the nine criteria of the Ramsar Convention as it is a unique, rare and representative wetland on the Eastern coast of the Adriatic and is a habitat for many endangered amphibians, reptiles and birds. It is also an important location for the migration of birds. Buljarica is one of the most attractive areas on the Montenegrin Adriatic coastline, and is thus economically insufficiently utilized. There is a real danger of transforming the whole ravine into a tourism complex and thus destroying all of its priceless natural assets.

### LANDSCAPE VALUE

Unlike anywhere else on the Montenegrin coast, due to its position Buljarica possesses unique landscape value. With Pastrovačka Gora in the hinterland, from which most of the Montenegrin coast is visible, and the rocks in the sea, it really represents “the wild beauty” of Montenegro.

The fact that it is in the heart of the coastal zone near Budva, which sees millions of overnights a year, but still possesses its virgin outlook, escapes nobody. However, it could provide an excellent model of smart development for the coast, with an ideal combination of tourism and nature protection.

### AIR, WATER, SOIL, NOISE

Together with Ulcinj Salina, Buljarica is one of the 7windiest locations on the Montenegrin coast, with a clear sky for a large number of days each year. On average, strong winds blow more than 110 days a year.

Stormy wind is less common, 30 days a year, while the number of cloudy days is the smallest on the Montenegrin coast, only 70 a year. Air and noise pollution are possible from the cars on the nearby main road connecting the towns along the coast.

# *Zašita prirode*

Plaža Buljarica zaštićena je 1968. godine kao predio posebnih prirodnih odlika. Ovaj status dobija svega 4 ha plaže i to kao stanište kseromorfne i vegetacije zaslanjenih staništa. Tokom dobijanja statusa zaštićenog područja 1968. godine, nije bilo dovoljno podataka o drugim segmentima flore i faune. Početkom 2006. godine dobija status Emerald staništa Bernske konvencije kao jedinstvena, djevičanska i biodiverzitetom bogata uvala na obali Jadrana.

2007. godine je proglašena za područje od međunarodnog značaja za boravak ptica (300 ha), prvenstveno kao gnjezdilište, zimovalište i odmaralište na proljećnoj seobi ptica koje preko Jadrana dolaze iz Afrike. Buljarica zadovoljava i tri od devet kriterijuma Ramsarske konvencije kao jedinstvena, rijetka i reprezentativna močvara na Istočnoj obali Jadrana, stanište brojnih ugroženih vrsta vodozemaca, gmizavaca i ptica, te ključno mjesto u migraciji ptica. Buljarica je jedan od najatraktivnijih prostora na crnogorskom Jadranu, ekonomski nedovoljno iskorišćen. Realna je opasnost da se cijeli prostor ove uvale pretvori u turistički kompleks i time unište sve njene neprocjenjive prirodne vrijednosti.

## PANORAMSKE VRIJEDNOSTI

Na crnogorskoj obali se ne može naći uvala većih panoramskih vrijednosti od Buljarice. Sa Paštrovačkom gorom u pozadini, sa koje se vidi većina crnogorske obale, i hridima u moru, ona zaista predstavlja „divlju ljepotu“ Crne Gore.

Činjenica da se nalazi u srcu obalne zone nadomak Budve, koja godišnje ostvari milione noćenja turista i da je i dalje zadržala svoj djevičanski izgled, nikoga ne ostavlja ravnodušnim. Ona može biti najbolji primjer pametnog razvoja obale, idealno komponujući turizam sa zaštitom prirode.

## VAZDUH, VODA, ZEMLJIŠTE, BUKA

Uz Ulcinjsku solanu na jugoistoku, Buljarica predstavlja jedno od najprovetrenijih priobalnih lokaliteta u Crnoj Gori, sa velikim brojem vedrih dana.

U prosjeku, jaki vjetar duva više od 110 dana godišnje, olujni je rjeđi, 30-tak dana, dok je tmurnih dana najmanje na Crnogorskom primorju, svega 70-tak. Zagađenje vazduha i buka mogući su od automobila sa obližnjeg magistralnog puta koji povezuje gradove na obali.









# Natural characteristics



*Ophrys sphegodes*

## FLORA AND VEGETATION

A band of *Phragmites australis* reedbeds stretches behind the beach, which is in some places wider than 30 m. Several lakes, constantly full of water, are located within this band. The reeds alternate with forests of ash (*Fraxinus oxycarpa*), oak (*Quercus pubescens*) and willow (*Salix sp.*) Forests and grasslands are divided by channels.

At higher altitudes, the wetland gives way to dry grasslands ending in settlements, above which there is rocky terrain with Mediterranean brush. The grasslands are neglected, without regular grass cutting. Many of them are covered with hornbeam (*Carpinus orientalis*), Jerusalem Thorn (*Paliurus spina cr.*) and Spanish Broom (*Sparcium junceum*) and other Mediterranean vegetation.



## *Prirodne karakteristike*



*Orchis papilionacea*

### FLORA I VEGETACIJA

Iza šljunkovite plaže, koja je na nekim mjestima šira od 30 m, pruža se pojas trske *Phragmites australis* u okviru kojeg se nalaze jezerca stalno puna vodom. Trsku smjenjuje pojas vlažnih šuma jasena *Fraxinus oxycarpa*, duba *Quercus pubescens* i vrba, *Salix sp.*. Šume i pašnjaci su ispresijecani kanalima.

Na većoj visini, močvara iz vlažnih prelazi u suve pašnjake koji se završavaju naseljima, iznad kojih se nalazi kameniti teren sa mediteranskom makijom. Pašnjaci su zapušteni i ne kose se redovno. Mnogi su po obodu obrasli grabovima *Carpinus orientalis*, dračom *Paliurus spina* cr. te *Sparcium junceum* i drugom mediteranskom vegetacijom.











*Belis perenis*



*Equisetum arvense*



*Euphorbia wulfeni*





HABITATS - STANIŠTA	PALEARCTIC HABITAT CLASSIFICATION PALEARKTIČKA KLASIFIKACIJA STANIŠTA
<i>Mediterranean and thermo Atlanthic salt meadows</i>	15.5
<i>Dunes</i>	16.2
<i>Riparian willow formations</i>	41.1
<i>Mediterranean oak woods</i>	41.7
<i>Mixed thermophilous forest</i>	41.8
<i>Southern alder and birch galleries</i>	44.5











*Rana temporaria*

#### AMPHIBIANS AND REPTILES

The Common Tree Frog (*Hyla arborea*), the Common Frog (*Rana temporaria*), Hermann's Tortoise (*Testudo hermanni*), the European Pond Turtle (*Emys orbicularis*), and the Grass Snake (*Natrix natrix*) are only some of the creatures that await the curious eyes of tourists.

The untouched nature of Buljarica, its open meadows, preserved diluvial forest, streams and reedbeds are habitats for these animals. In slow-flowing channels there are important populations of Smooth Newt (*Triturus vulgaris*). There is probably, no larger number of such animals on the Eastern coast of the Adriatic, even in cleaner waters.

Gatalinka, *Hyla arborea*; livadska žaba, *Rana temporaria*; kornjača, *Testudo hermanni*; vodena kornjača, *Emys orbicularis*; prugasata bjelouška, *Natrix natrix*; samo su dio onoga što čeka radoznale oči turista.

Netaknuta priroda Buljarice, otvorene livade, očuvana poplavna šuma, kanali i trščaci koji su pod vodom idealna su staništa za ove grupe životinja. U kanalima gdje voda nije brza ima značajnih populacija mrmoljka, *Triturus vulgaris*. Vjerovatno ih na istočnoj obali Jadrana nema u većem broju i u čistijoj vodi.

EUROPEAN TREE FROG - GATALINKA (*Hyla arborea*)



One of the smallest European frogs, up to 5 cm long. Its colour depends on temperature and humidity, and thus varies from yellow to ochre, green and olive. It lays 10-50 eggs in wetland vegetation from the end of March till May. It lives on branches or reeds. Its skin stretches on the top of its fingers allowing it to stick even to the back of leaves.

Jedna od najmanjih evropskih žaba, dužine do 5 cm. Boja joj zavisi od temperature i vlažnosti i može je mijenjati od žute, oker, preko zelene do maslinaste. Polaže 10-50 jaja u močvarnoj vegetaciji od kraja marta do maja mjeseca. Uvijek je na granama ili trsci. Kožna proširenja na vrhovima prstiju omogućavaju joj da se lijepi i na naličja listova.



Widespread in Southern and Central Europe. The shell is dark with bright spots. During the day it likes to sunbathe out of water. A good swimmer and diver, unlike turtles it is faster and more skilled on the ground. It eats fish, frogs, tritons and other water animals. It breeds in May, laying eggs in the ground which usually do not hatch until the following year. It is on the IUCN Red List as a vulnerable species. In the Balkans it is the target of collectors.

Raširena je u Južnoj i Centralnoj Evropi. Oklop je tamne boje sa svijetlim pjegama. Tokom dana se rado sunča van vode. Dobro pliva, roni i za razliku od kornjače, brža je i spretnija na kopnu. Hrani se ribama, žabama, mrmoljcima i ostalim vodenim životinjama. Pari se u maju. Jaja polaže u zemlji, ali se ona obično pile tek naredne godine. Nalazi se na Crvenoj listi IUCN kao ranjiva vrsta. Na Balkanu plaća danak sakupljačima akvaristima.





*Emberiza melanocephala*



*Merops apiaster*

## BIRDS

Buljarica is one of the largest and best preserved ecological complexes on the Adriatic coast. Wetlands with brackish water are ideal habitats for insects, amphibians and reptiles as well as vegetation, which make up the food base for birds. In winter, when a large part of the ravine is under water, Buljarica is the habitat for feeding and resting populations of the Pygmy Cormorant (*Phalacrocorax pygmeus*), the Grey, Great White and Little Heron (*Ardea cinerea*, *Egretta alba*, *Egretta garzetta*), and other aquatic birds. In summer it is a nesting place for the Levant Sparrowhawk (*Accipiter brevipes*), and in the vicinity on the sea rocks, the Sea Falcon (*Falco eleonora*) also breeds.

The Reed Warbler (*Acrocephalus arundinaceus*) and Kingfisher (*Alcedo atthis*) breed in the marshes and wetlands while the Middle Spotted Woodpecker (*Dendrocopos medius*) and its relative the Syrian Woodpecker (*Dendrocopos syriacus*) nest in diluvial forests. The Rock Nuthatch (*Sitta neumayer*) and the Mediterranean Tit (*Parus lugubris*) breed in the surroundings. Buljarica is an important point on the migratory corridor, which is confirmed by the strong hunting pressure during winter. Several species of ducks and waders use it to rest during migration. The types of duck that migrate this way are the Wigeon (*Anas Penelope*), Pintail (*Anas acuta*), Teal (*Anas crecca*) and Garganey (*Anas querquedula*). Waders using this corridor include the Curlew Sandpiper (*Calidris feruginea*), Whimbrel (*Numenius phaeopus*) and others.

Buljarica je jedno od najprostranijih očuvanih ekoloških kompleksa na jadranskoj obali. Močvare sa bočatnom vodom idealna su staništa insekata, vodozemaca i gmizavaca, te vegetacije koja čini prehrambenu bazu za ptice. Tokom zimskih mjeseci, kada je dobar dio uvale pod vodom, Buljarica je stanište za ishranu i odmor fendaka, *Phalacrocorax pygmeus*, sive, velike i male bijele čaplje, *Ardea cinerea*, *Egretta alba*, *Egretta garzetta*, te ostalih vrsta ptica vezanih za vodu. U ljetnjim mjesecima ona je gnjezdilište kratkoprstog kobca *Accipiter brevipes* a nadomak nje, na morskim hridima i morskog sokola *Falco eleonora*.

U tršćacima i močvarama gnijezdi trstenjak, *Acrocephalus arundinaceus*, vodomar, *Alcedo atthis*, a u poplavnim šumama srednji djetlić, *Dendrocopus medius* i njegov srodnik *Dendrocopos syriacus*. U okolini gnijezdi brgljez lončar, *Sitta neumayer* i mediteranska sjenica, *Sitta neumayer*. Buljarica je značajna tačka na seobnom koridoru, što potvrđuje i ekstremno jak lovni pritisak tokom zime: više vrsta plovki i šljukarica je koriste za odmor tokom seobe, u prvom redu patke: zviždarka, *Anas penelope*; šiljkan, *Anas acuta*; krdža, *Anas crecca*; martovka ili mala patka, *Anas querquedula*, te šljukarice: crvenogrļa sprutka, *Calidris feruginea*; srednja carska šljuka, *Numenius phaeopus* i druge.

#### PENDULINE TIT - REMIZ (*Remiz pendulinus*)



The Penduline tit is connected to freshwater or brackish water. It is characterised by a grey head with a black line around the eyes. The nests hang above the water with 6 to 8 white eggs. The male makes several nests while the female selects one for laying the eggs. It eats insect and spider larvae and seeds in the winter. It is always lively and quite noisy

Sjenica vezana za slatku ili brakičnu vodu. Siva glava sa crnom linijom oko očiju. Gnijezda su viseća iznad vode sa 6 do 8 bijelih jaja. Spareni mužjak napravi više gnijezda i ženka odabira jedno za polaganje jaja. Hrani se larvama insekata i paučima, zimi sjemenjem. Uvijek živahna i jako bučna.



MOORHEN - BARSKA KOKICA (*Gallinula chloropus*)



The Box Moorhen is a small bird of green and black feathers with a bright red and yellow beak. These birds are numerous in Montenegro and are found on many water bodies that have dense vegetation on the shore. It nests in reeds or in shrubs, having two to three nests with 5 to 11 eggs. It is omnivorous, eating food found on the water surface or on the ground. Around twenty pairs breed in Buljarica.

Mala ptica zeleno-crnog perja, sa jarko crvenom i žutom bojom na kljunu. U Crnoj Gori brojna gnjezdarica na mnogim vodenim površinama sa gustom vegetacijom na obalama. Gnijezdi u trsci ili u žbunju, dva do tri legla sa 5 do 11 jaja. Svaštojed je ali se pretežno hrani beskičmenjacima, hranu uzima na površini vode ili na kopnu. U Buljarici gnijezdi dvadesetak parova.

COOT - BALJOŠKA (*Fulica atra*)



This black-grey aquatic bird with a white shield on the forehead is a nesting bird that is very common in Montenegro, particularly Lake Skadar. This species is especially numerous when wintering. It creates one or two nests on floating water vegetation. Each bird usually lays 5-15 eggs. Plants are the main food for these birds and they rarely eat small water animals. They can also dive for their food. It is a favourite hunting species and has almost been eradicated from nesting in Buljarica. Today, only a few couples breed their infants on the lakes of Buljarica.

Okruglasta vodena kokica crno-sive boje, sa bijelom lisom na čelu. U Crnoj Gori brojna gnjezdarica, posebno na Skadarskom jezeru. Posebno brojna na zimovanju. Plutajuća gnjezda gradi na vodenom rastinju, jedno do dva legla sa 5-15 jaja. Hrani se uglavnom biljem, manje malim vodenim životinjama, može da roni. Omiljena je lovna vrsta i skoro istrijebljena sa gniježđenja u Buljarici. Danas svoje mlade na jezercima Buljarice podiže svega nekoliko parova ove ptice.

GREY HERON - SIVA ČAPLJA (*Ardea cinerea*)



The Grey Heron is a big, elegant grey bird. It populates wetland and cultivated areas with water in the vicinity. It nests in colonies on trees, rarely in reeds. It has one nest with 4-6 eggs. A typical meal for this species includes various small animals found in the water and surrounding area. These nesting birds are not numerous in Montenegro but are common on all coastal marshes in winter, including Buljarica.

Velika, elegantna ptica sivo tamnih boja. Naseljava močvarne i kultivisane predjele sa vodom u blizini. Gnjezdi se u kolonijama na drveću, rijetko u trsci. Ima jedno leglo sa 4-6 jaja. Hrani se malim životinjama u vodi i oko nje. U Crnoj Gori nije posebno brojna gnjezdarica ali je česta na svim priobalnim vlažnim staništima tokom zime, pa i na Buljarici.

MOST IMPORTANT FAUNA IN TERMS OF AMPHIBIANS, REPTILES AND BIRDS  
 NAJZNAČAJNIJI PREDSTAVNICI FAUNE VODOZEMACA, GMIZAVACA I PTICA

Amphibians Vodozemci	<i>Hyla arborea</i> <i>Triturus vulgaris</i>
Reptiles Gmizavci	<i>Emys orbicularis</i> <i>Ophisaurus apodus</i> <i>Testudo hermanni</i> <i>Vipera amodytes</i>
Birds Ptice (breeding) (gnjezdarice)	<i>Accipiter brevipes</i> <i>Acrocephalus arundinaceus</i> <i>Dendrocopus syriacus</i> <i>Galinula chloropus</i> <i>Parus lugubris</i> <i>Rallus aquaticus</i>
(wintering) (zimovalice)	<i>Anas penelope</i> <i>Ardea cinerea</i> <i>Egretta alba</i> <i>Egretta garzetta</i> <i>Phalacrocorax pygmeus</i>
(migrating) (migranti)	<i>Anas querquedula</i> <i>Limosa limosa</i> <i>Numenius phaeopus</i>

INSECTS - INSEKTI



*Libellula depressa*



## DRAGONFLIES - VILINI KONJICI (*Odonata*)

Because of the importance of the survival of flora (increasingly scarce along the 800-km long eastern shore of the Adriatic), and due to the fact that Tivat Salina is a habitat for numerous endangered species of amphibians, reptiles and birds, it was declared a special flora and fauna reserve in 2007. This reserve was the first of its kind on the Montenegrin coast and the first area on the coast to be protected after 1968, when many beaches were protected. Tivat Salina is an Emerald site under the Bern Convention and an important bird area in Montenegro.

Razvojni ciklus ove grupe insekata vezan je za vodena staništa. U vodi polažu jaja i imaju metamorfoze do stadijuma adulta, kada napuštaju vodenu sredinu i svojim bojama i letom postaju pravi ukras prirode. Pored značaja u lancima ishrane, ovi predatori u dobroj mjeri regulišu brojno stanje ostalih grupa insekata kojima se hrane. Na području Crne Gore registrovano je 62 vrste vilinih konjica. Na Buljarici, Tivatskim solilima i Ulcinjskoj solani registrovana je 21 vrsta. Ograničavajući faktori za diverzitet vrsta ove grupe insekata na navedenim staništima čine slana i bočata voda, jake struje ili nepravilni vremenski ciklusi plavljenja površina.

*Aeshna affinis*



*Orthetrum cancellatum*



*Platynemis pennipes*

