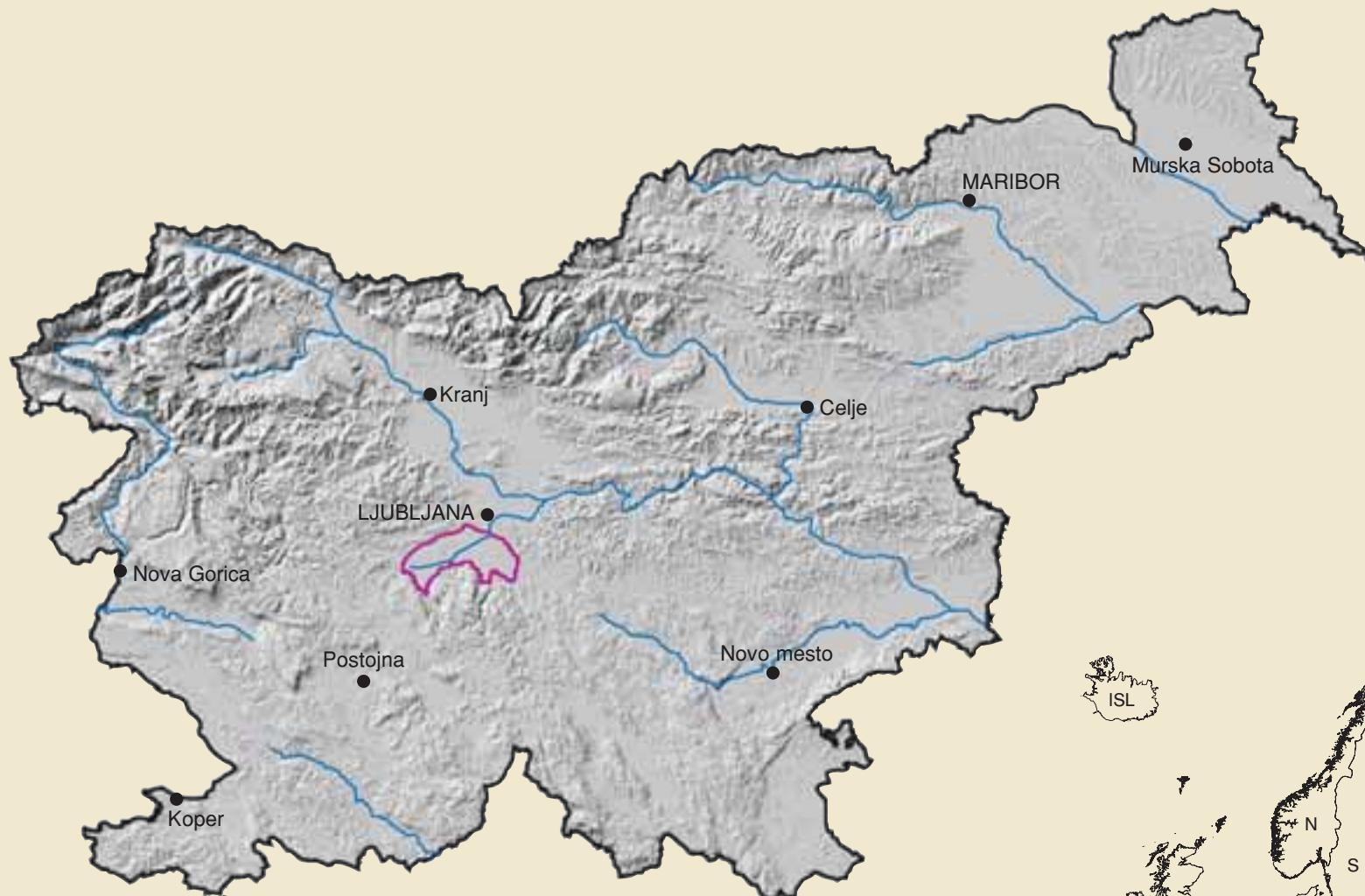


# Ljubljansko barje





Prav na pragu glavnega mesta, Ljubljane, le nekaj korakov od zadnjih mestnih ulic, se razprostira Ljubljansko barje. Dobrih 150 km<sup>2</sup> močvirne ravnice zaznamuje neskončen mozaik travnikov, streljinikov, njiv, jarkov in mejic. Sem in tja silijo kvišku za alpsko deželo kar sramotno nizko zeleni osamelci. Skoraj obkroženo z avtocestami, barje v hitečemu popotniku ne vzbudi posebnega zanimanja. Le kaj je lahko posebnega v pokrajini, ki se dotika velemesta in ima za povrh ime, povezano s močvirjem? Toda kogar pot zanese v notranjost, bo prijetno presenečen. Kot da je črna barjanska zemlja posrkala mestni hrup in je trdovratna barjanska megla odčarala navzočnost človeka v teh krajih. Čeprav je Ljubljansko barje s svojimi neutrudnimi posegi soustvaril človek, oči radovedneža hitro pretenta neskončno zelenilo, njegova ušesa pa zapolnijo pesmi ptic, žuželk in žab. Kolesje vsakdanjika se ustavi.



On the very threshold of Ljubljana, the capital of Slovenia, no more than a few steps from its last suburban streets, spreads Ljubljansko Barje (Ljubljana Moors). This almost 160 km<sup>2</sup> large marshy plain is marked by an interminable mosaic of grasslands, litter woodlands, fields, ditches and hedges. Here and there, solitary green hillocks rise from this countryside, indeed "shamefully" low for this Alpine country. Almost encircled by motorways, the Ljubljansko Barje arouses no special interest in a hurrying traveller. What on earth can be so special in this landscape, which lies on the edge of the city and whose name is, on top of it all, closely associated with moors? All those, however, who happen to find themselves in its interior, are pleasantly surprised. As if the black palustrine soil has sucked up the city bustle and as if the obstinate moor mist has lifted a spell from the human's presence in these places. Although Ljubljansko Barje has been created by humans through their tireless overexploitation of the area, the eyes of inquisitive people are quickly deluded by the infinite greenery, while their ears are filled with the songs of birds, insects and frogs. Here, the wheels of everyday life simply stop.



Narava je za oblikovanje kotline, katere del je Ljubljansko barje, potrebovala milijone let. Ker se razprostira na tektonsko aktivnem območju, pripisujemo nastanek barja pogrezanju matične kamnine. V uدورino so se zlivale kraške podzemne vode in potoki, ki so s seboj prinašali prod in druge usedline. Reka Sava je nanašala velike količine proda, kar je povzročilo zajezitev Ljubljanice ob izlivu v Savo in poplavitev celotne barjanske kotline. Tisočletja rečnih nanosov so jezero počasi zasipavala, voda je odtekala, dokler se pred kakimi šest tisoč leti količarsko jezero ni osušilo in omogočilo nastanek velikega močvirja, pozneje pa nizkega in visokega barja.

*Ljubljansko barje je zemljepisno ime za območje, ki leži med Ljubljano, Vrhniko, Krimom in Škofljico.*

*Barje je skupno poimenovanje za območje Črna vas, Hauptmanca, Lipe, Ilovica in Ižanska cesta, torej za del Ljubljanskega barja, ki sedaj leži v Mestni občini Ljubljana.*

*Barje, pisano z malo začetnico, pa v slovenskem jeziku označuje močvirnato območje z značilno floro in favno.*

*Ljubljansko Barje is geographical name for the area spreading between the Ljubljana, Vrhnika, Krim and Škofljica.*

*Barje is a common name for the villages of Črna vas, Hauptmanca, Lipe and Ilovica, and for Ižanska cesta (Ig Road), therefore for that particular part of Ljubljansko Barje, which is now within the borders of Ljubljana City Council.*

*In Slovene, "barje" denotes a boggy area with its characteristic fauna and flora.*



For the making of the basin, with Ljubljansko Barje as its part, nature needed millions of years. As the Ljubljansko Barje spreads on tectonically active area, its origin has been attributed to the sinking of bedrock. Into this depression flew numerous karst underground waters and streams, bringing shingle and other sediments with them. The Sava river brought with it huge quantities of gravel, virtually damming the Ljubljanica river where it joined the Sava and inundating the entire Ljubljansko Barje basin at the same time. Through millennia, the lake was gradually filled up by the river's alluvial deposits, until the lake with its pile dwellers dried up some six thousand years ago and enabled the origin of large marshes and eventually fens and raised bogs.



Zaradi visoke talne vode in posebnih kemijskih razmer na barju začne nastajati šota. To je plast odmrlih delov barjanskih rastlin, ki na barju zaradi pomanjkanja kisika ne segnijojo, pač pa se kopijo, tako da se plast šote počasi debeli. Vse dokler ima rastlinstvo, zraslo na šoti, še stik s podtalnico in dostop do mineralnih snovi, lahko govorimo o nizkem barju.

V ugodnih razmerah pa lahko plast šote postane tako debela, da se njen zgornji del preneha napajati s podtalnico. Nastane visoko barje. Edini vir vode za rastline visokega barja so padavine, količina hranič je neznatna. V tem skromnem, skrajnem okolju uspevajo le posebej prilagojene rastline, najpomembnejši graditelji visokih barij pa so šotni mahovi. Ti so sposobni hitro vsrkati izjemne količine deževnice in jo zadržati skozi sušno obdobje.



Owing to the high groundwater level and specific chemical conditions, peat begins to form on bogs. This is a layer of dead marsh plants, which due to the lack of oxygen do not rot but accumulate there, making the layer of peat gradually thicker. Until the plants grown on peat retain their contact with groundwater and access to mineral substances, we can speak of fens. In favourable conditions, however, the peat layer can become so thick that its upper part can no longer be supplied with groundwater. A raised bog is formed. The only water source for the raised bog plants is precipitation, the quantity of nutrients is insignificant. In this extreme but modest environment can survive only plants that are specifically adapted to these conditions. The most important builders of raised bogs are peat mosses, which can rapidly absorb exceptional quantities of rainwater and retain it through dry spells.

*Slovenski jezik pozna kar štiriindvajset izrazov, večino ljudskega porekla, za pojave v zvezi z zastajajočo vodo. Ljubljanski morost, močvir ali močvirje so bili uveljavljeni izrazi vse do 1880, ko Fran Levstik v poročilu o melioracijah prvič uporabi naziv Ljubljansko barje in se s tem, marketinško prav spretno, za vselej izogne med ljudmi skrajno nepriljubljenemu močvirju.*

*The Slovene language knows no less than 24 expressions, mostly of folk origin, for the phenomena associated with stagnate water. The terms Ljubljanski morost (morass) and močvir (quagmire) had been generally used until 1880, when the name Ljubljansko Barje (Ljubljana Moors) was for the first time used by Fran Levstik in his report on land drainage, upon which the extremely unpopular morass or quagmire completely disappeared from the people's vocabulary.*



Okrugolistna rosika / Round-leaved Sundew / *Drosera rotundifolia*



Šotni mah / Peat Moss / *Sphagnum sp.*





Voda je temeljni element nastanka in obstoja barjanske ravnice, obenem pa element, ki ga je na Ljubljanskem barju vedno bodisi premalo bodisi preveč. Voda ima tu dve podobi. Prva je umazano rdeča, mirujoča in se odceja iz barjanskega zemljišča. Barjanska voda. Druga je živahna, čista voda kraškega izvora, ki se steka iz številnih kraških izvirov izpod Krima v potoke in rečice, katerih zadnja barjanska postaja je reka Ljubljanica. Pravimo ji tudi reka sedmih imen, saj v svojem toku večkrat ponikne in se spet prikaže na površju. Zadnjič iz izvirov okrog Močilnika in Retovja kot Ljubljanica. Kot nižinska reka s komaj metrskim padcem od Vrhnik do Ljubljane je svojčas tekla v okljukih, ki pa jih danes ni več videti.



Water is the basic element of the origin and survival of the Ljubljansko Barje plain, and at the same time the element, which has been in this area always either lacking or superfluous. At the Ljubljansko Barje, water has two different faces. The first is dirty red, stagnant water, slowly trickling from the Ljubljansko Barje soil. The other is vivacious, pure water of karst origin, flowing from numerous karst springs under Mt. Krim into streams and rivulets, whose last stop at the Ljubljansko Barje is the Ljubljanica river. We also call it the river of seven names, for during its course it sinks and reappears on the surface several times, the last time from the springs around Močilnik and Retovje as the Ljubljanica. Once upon a time it flew, as a lowland river with no more than a meter drop from Vrhnika to Ljubljana, along numerous meanders which, however, can no longer be seen today.





Struga reke Ljubljanice med Vrhniko in Ljubljano zaradi svoje kakovosti in znanstvene izpovednosti sodi med najpomembnejša arheološka najdišča v Sloveniji. Naključne najdbe v času prvih regulacij so ob koncu 19. stoletja privedle do ene prvih podvodnih arheoloških raziskav v Evropi pod vodstvom tedanjega ravnatelja Deželnega muzeja Karla Dežmana ob pomoči potapljačev avstro-ogrške mornarice. Najdeni predmeti iz različnih obdobij od prazgodovine do novega veka, še posebej bogate lokacije in vsebina najdb kažejo, da je imela Ljubljanica tako v času prazgodovine kot tudi kasneje v času naselitve Slovanov kulturni pomen. Zaradi zgodbe, ki jo o zgodovini Ljubljanskega barja priповедuje Ljubljanica, je od leta 2003 reka zaščitenega kot kulturni spomenik.



Due to its quality and scientific narrative features, the bed of the Ljubljanica river between Vrhnika and Ljubljana is considered one of the most significant archaeological sites in Slovenia. Various random finds during the first regulations at the end of the 19th century led to one of the first underwater archaeological investigations in Europe under the direction of Karel Dežman, head of the Provincial Museum of that time, and with the aid of divers of the Austro-Hungarian Navy. The found artefacts dating to different periods, from prehistory to the modern age, and especially the rich localities and contents of the finds, indicate that in prehistory as well as in the period when the Slavs settled in this part of the world the Ljubljanica had a cultic meaning. Owing to the story told by the river about the history of the Ljubljansko Barje, the Ljubljanica has been since 2003 protected as cultural property.



Kolo dvokolesnika iz jesenovine  
(staro približno 5200 do 5600 let) /  
The wheel of a two-wheeler made of  
ash tree (approximately 5200 to  
5600 years old)

Razen v muzejih ali globoko pod barjanskimi tlemi danes ni več mogoče videti dokazov o tisočletja stari kulturi, ki si je kot prva za svoj dom izbrala tedaj še ojezerjeno barje. V bližini Ig, na Resnikovem grabnu, so odkopali ostanke količ, ki segajo v paleolitik (staro kameno dobo). S to naselbino je bil napovedan razcvet posebne količarske kulture Ljubljanskega barja, ki je svoj vrh dosegla v bakreni dobi. Doslej je znanih 23 količarskih naselbin, barjanska tla pa vsako leto postrežejo z novimi najdbami. O vpetosti barjanskih količarjev v širši evropski prostor priča nedavna najdba kolesa in osi dvokolesnika iz časa okoli 3200 let pred našim štetjem. Za zdaj gre za najstarejšo najdbo te vrste na svetu.

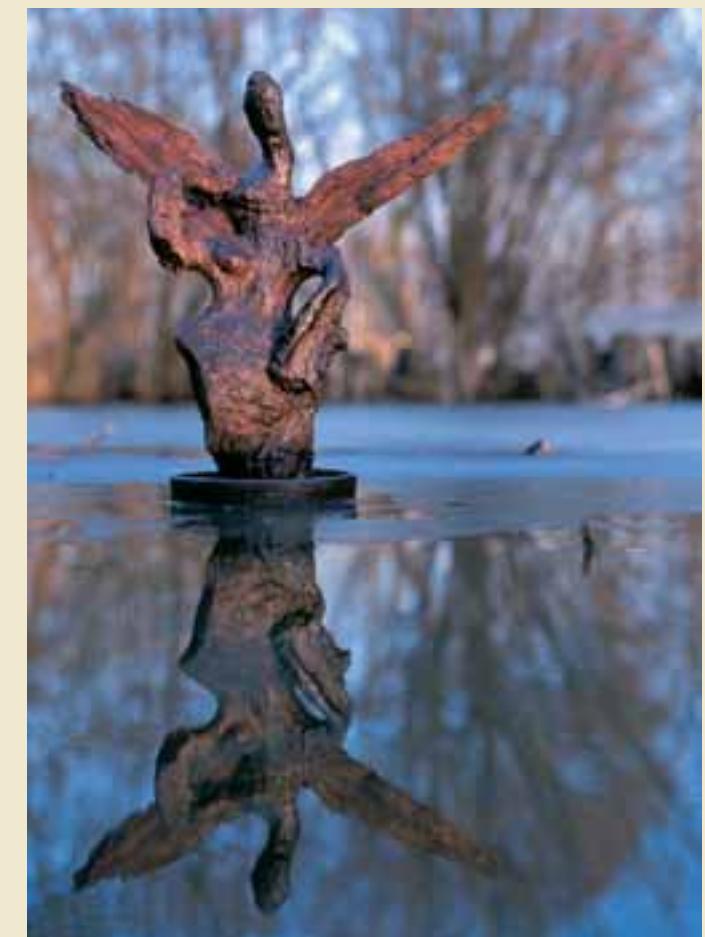


Except in museums and deep under the Ljubljansko Barje floor, we can no longer see any evidence of millennia old culture, which was the first to choose, as its home, the moors that were in those times still restrained with water. In the vicinity of Ig, at Resnikov graben, the remains of pile dwellings dated to the Palaeolithic (Old Stone Age) were excavated. This particular settlement announced a significant rise in the very special pile dwelling culture of Ljubljansko Barje, which reached its peak in the Copper Age. Twenty-three pile dwellings have been discovered so far, but the Ljubljansko Barje grounds lay bare new finds practically each year. About the Ljubljansko Barje pile dwellers' contacts with the wider European territory speak a fairly recent find of a wheel and axle of a two-wheeled cart dated to around 3200 BC. For the time being, this is the oldest find of this kind in the world.

Koliščarji so bili poljedelci, živinorejci in lovci, živeli so v lesenih naselbinah, zgrajenih na leseni kolih, zabitih v jezersko dno. Verovali so v Mater zemljo, častili Sonce in izdelovali prelepo keramiko, uporabno za vsakodnevne in duhovne potrebe. Včasih so tudi trgovali, z ljudstvi od Bližnjega vzhoda do evropskega severa. Po tej stari trgovski poti od Črnega morja, po Donavi, Savi in Ljubljanici, potem pa z ladjo na ramenih vse do Jadranskega morja naj bi se po zlato runo odpravil tudi starogrški junak Jazon z argonavti. In mimogrede ustvaril najlepšo legend o nastanku Ljubljane, ki ji do dandanes niso prišli do živega še tako znanstveno utemeljeni argumenti.

*Equrna, krilata koliščarska boginja trgovcev, priča tudi o kulturnem vplivu koliščarske kulture v širšem srednjeevropskem prostoru. Ali je mogoče, da je Merkur, kasnejši rimski bog trgovcev, dobil krila po Equrninem vzoru?*

*Equrna, the winged goddess of the pile dwelling tradesmen, speaks of cultural influence of the pile dwelling culture in the wider European territory. Is it possible that Mercury, the later Roman god of commerce, acquired his wings on the pattern of Equrna?*



Pile dwellers were tillers, stockbreeders and hunters, living in settlements built on wooden piles rammed into the lake floor. They believed in Mother Earth, worshipped the Sun and made gorgeous pottery applicable for everyday and spiritual use. At times they also traded with peoples from the Near East to the European north. Along this ancient trade route from the Black Sea, along the Danube, Sava and Ljubljanica rivers, and then with the ship on the shoulders down to the Adriatic Sea, the old Greek hero Jason was supposed to sail with the Argonauts in search of the Golden Fleece. In passing, he created the most beautiful legend about the origin of Ljubljana, which could not have been tackled till this very day even by the most scientifically substantiated argumentations.



Z vprašanji, kako ukrotiti barjanske vode in jih pokoriti svojim potrebam, se človek ukvarja že tisočletja. Če je legendarni Jazon svojo barko raje prestavljal po kopnem, ko je zmanjkalo reke, in so prvi prebivalci Ljubljanskega barja, koliščarji, še prilagodili svoje bivanje naravnemu okolju, so Rimljani prvi aktivno posegli v oblikovanje krajine. Na območju današnje Ljubljane je nastajalo pomembno mesto, Emona, odeto v marmor izpod Krima. Navdušenim graditeljem ni bilo odveč skopati regulacijskega kanala zaradi lažjega transporta marmornih blokov iz podpeškega kamnoloma. Tudi nadaljnji posegi v strugo Ljubljanice in drugih barjanskih potokov so bili namenjeni izboljšanju plovnosti, medtem ko redne barjanske poplave zaradi nenaseljenosti območja pravzaprav niso nikogar motile.



The issues of how to curb the marsh waters and to subdue them to their needs have been dealt with by humans for millennia. If the legendary Jason preferred to shift his ship on land when running out of rivers, and if the inhabitants of the Ljubljansko Barje, the pile dwellers, were still able to adapt to the natural environment, it was the Romans who were the first to actively reshape the landscape. In the area of the present-day Ljubljana, an important town, called Emona, was built, donned with marble brought from under Mt. Krim. The enthusiastic builders found it not at all difficult to dig a regulation channel for an easier transport of marble blocks from the Podpeč quarry. All the ensuing interventions into the bed of the Ljubljanica river and other Ljubljansko Barje streams were also meant to improve navigability, while the regular Ljubljansko Barje floods in fact troubled nobody at all due to the fact that the area was practically unpopulated.

*Črn podpeški marmor, iz katerega je nastajala Emona, je še danes cenjen gradbeni material. Morda v najlepši luči nam ga je predstavil Jože Plečnik, ki je s podpeškim marmorjem opremil interiere svojih neponovljivih stvaritev.*

*The black Podpeč marble, the building material of which Emona was actually built, is still in great demand. Its true beauty was perhaps best presented by the architect Jože Plečnik, who equipped the interiors of his unforgettable creations with it.*





Nad zamislio, da se "močvirje" osuši in spremeni v plodno kmetijsko zemljo, so se vse od 16. stoletja navduševali različni posamezniki oblasti. Slišala jih je šele cesarica Marija Terezija in leta 1769 z dekretom ukazala, da se napravi popis "Ljubljanskega močvirja", pripravi načrt osušitve in močvirje spremeni v rodovitni svet. Ime, ki je v naslednjih desetletjih, celo vse do danes, najbolj zaznamovalo človekove posege v Ljubljansko barje, je Gabriel Gruber, avtor načrtov in vodja osuševalnih del. Poglobitve strug, izkopi odvodnikov, podrtje jezov, predvsem pa izkop Cesarskega, danes po njem imenovanega Gruberjevega kanala so kmalu prinesli določene rezultate. Gladina podtalnice se je znižala, poplave so postale predvidljive in obvladljive, po nekaj tisočletjih in bolj na silo kot ne so oblasti Ljubljansko barje znova naselile.



The idea of draining the moors and changing them into arable land was highly appealing to various individuals as early as in the 16th century, and it was the empress Maria Theresa who in 1769 issued a decree, ordering an inventory of the Ljubljansko Barje to be made, a plan for its reclamation to be prepared, and finally the area to be turned into land suitable for farming. The person, who in the ensuing decades, and even up till this very day, most clearly marked human interventions into the Ljubljansko Barje, was Gabriel Gruber, the author of the plans and leader of the reclamation projects. The deepening of beds, digging of drainage channels, pulling down of dams, and above all the digging of the so-called Imperial, today's Gruber Channel (named after him), soon brought certain results. The groundwater level fell, the floods became predictable and controllable, and after a few millennia the authorities managed to recolonise the Ljubljansko Barje, although more or less by force.



V tridesetih letih devetnajstega stoletja, skoraj takoj po zgraditvi Gruberjevega kanala, je ljubljanska občina pod vodstvom župana Hradeckega poceni prodajala in oddajala po 20 oralov velike parcele. Pogoj: postavitev stanovanjskega in gospodarskega poslopnja ter redno vzdrževanje odtočnih jarkov. Mnogi so zgrabili priložnost, še posebej, ker je lastništvo posesti pomenilo odpustek iz cesarske vojske. Na območjih, kjer to prej ni bilo mogoče, so zrasla naselja, zaradi mehkih barjanskih tal se je razvila nova vrst stavbarstva, graditev hiš na pilotih. Leta 1828 je bila zgrajena prva cestna povezava čez Ljubljansko barje - Ižanska cesta. Plavajoča cesta, zgrajena na butarah iz dračja in zasuta s peskom, ima še danes enako osnovo. Z veliko vneme, a z nekaj manj uspeha, so se lotili tudi poljedelstva. A že v prvih letih kolonizacije so ugotovili, da se pravo bogastvo Ljubljanskega barja skriva drugje.



In the 1930s, almost immediately after the Gruber Channel was built, the City Council of Ljubljana, led by its mayor Hradetzki, began to let out and sell, at reasonable prices, 20 acres large plots of land, the only condition being that a residential building and an outbuilding were built and that drainage channels were regularly maintained. Many seized this opportunity, particularly as the property ownership meant a dismissal from the Imperial Army. In the areas, where this had not been possible earlier on, new settlements grew, and owing to the soft palustrine soil a new type of architecture developed, i.e. building of houses on pile foundations. In 1828, the first road was constructed across Ljubljansko Barje - Ižanska cesta. This floating road, built on bundles of brushwood and filled with sand, still has the same basis as in the year when originally made. With much zeal, although with less success, agriculture began to be practised. During the very first years of colonisation it was ascertained, however, that the Ljubljansko Barje's true wealth lay somewhere else.



*Zabijanje kolov za hišne temelje je zahtevalo moč in vztrajnost, predvsem pa kakovostno delo, saj barje ne odpušča površnosti in naglice. Do dvesto šest- in večmetrskih kolov za eno poslopje so zabijali ročno, šest moških s posebnim, več kot sto kilogramov težkim ovnom.*

*Ramming of piles into the ground for house foundations required much strength and persistency, and above all skilled work, for the Ljubljansko Barje pardons no carelessness and rashness. Up to two hundred at least six metres long piles were rammed manually into the ground for a single, usually by six men and with the aid of a ram weighing more than a hundred kilos.*





V stoletjih, ko človek še ni posegal v naravne procese na Ljubljanskem barju, se je naložila precejšnja količina šote, od dveh pa do ponekod neverjetnih devetih metrov. Izročilo pravi, da se svojčas zaradi višine šote z Lavrice ni videlo zvonika cerkve na Ig. Poljedelstvo, ki kljub velikim naporom in vlaganjem ni dajalo pričakovanih rezultatov, so počasi opustili in začeli intenzivno izkopavati šoto, ki je zagotavljala bistveno višje zasluzke. Rezanje šote se je razmahnilo v pravo industrijo, z barjansko šoto so se greli Ljubljančani, šota je poganjala vlake, ladijske parnike, rafinerijo sladkorja, tovarno smodnika... A zmanjkovalo je je mnogo hitreje, kot so načrtovali. Barjansko dno se je nižalo, voda se je vrnila na Ljubljansko barje, v posmeh stoletnim poskusom osušitve.

During the centuries, when humans were not yet encroaching upon natural processes at the Ljubljansko Barje, a great quantity of peat piled up - from two to quite unbelievable nine metres here and there. Tradition says that once upon a time the belfry of the Ig church could not be seen from Lavrica due to the height of the accumulated peat. Agriculture, which in spite of some great efforts and investments did not yield the expected results, was gradually abandoned and replaced by intensive digging of peat, which brought the people much higher earnings. The peat cutting expanded into a true industry, for peat was used not only by the Ljubljana people for heating, but it also propelled trains, steamships, sugar refinery, gunpowder factory ... Still, it ran out much quicker than expected. The floor subsided, and water yet again returned to the Ljubljansko Barje, becoming an object of derision to the century-old attempts to drain the water from it.



Zaloge šote so se sredi petdesetih let 19. stoletja zdele neskončne. Popolnoma natančen matematični račun je pokazal, da bo ob nemajhni letni porabi šote v zasebnih in industrijskih pečeh barjanska šota zadostovala za nadalnjih 659 let. Pozabili pa so, da se enkrat načeta šota sama seseda in prhni.

In the 1950s, the peat supplies seemed inexhaustible. A very accurate mathematical calculation showed that with its not at all modest annual consumption in private and industrial furnaces, the accumulated peat would suffice for further 659 years. But they forgot that once the peat is cut it begins to sink into itself and moulder.







Človek pa je trmasto bitje. Tudi pretežni del dvajsetega stoletja so mnogi posvetili načrtom za, zdaj pa res, dokončno osušitev Ljubljanskega barja. Tehnologija se je sicer spremnjala, osnovna ideja pa ne. Dodatne poglobitve strug, akumulacije, nasipi, odvodni kanali, črpalne postaje... so bile stalnica razvojnih načrtov in planskih dokumentov ljubljanskih mestnih oblasti vse do osemdesetih let prejšnjega stoletja. Takrat je inflacijo visokoletičih obljud o boljšem življenju srečala realnost v obliki pomanjkanja denarja pa tudi vse glasnejših opozoril ljubiteljev narave. Človek in narava sta v tisočletnem medsebojnem boju in ljubezni ustvarila izjemen splet naravnih in kulturnih vrednot.

Man, however, is a stubborn creature. The greater part of the twentieth century was yet again dedicated by a whole series of people to the plans “for this time indeed final drainage of the Ljubljansko Barje”. The technology changed, but not the idea itself. Additional deepening of riverbeds, reservoirs, dykes, drainage channels, pumping stations etc. were a constant in the development plans of the municipal authorities until no less than the 1980s. At that time, the inflation of great promises about a better life was met by reality in the form of insufficient money as well as in the shape of increasingly louder warnings by nature lovers. In a millennium long mutual struggle and love, man and nature created an exceptional interlacement of natural and cultural values.

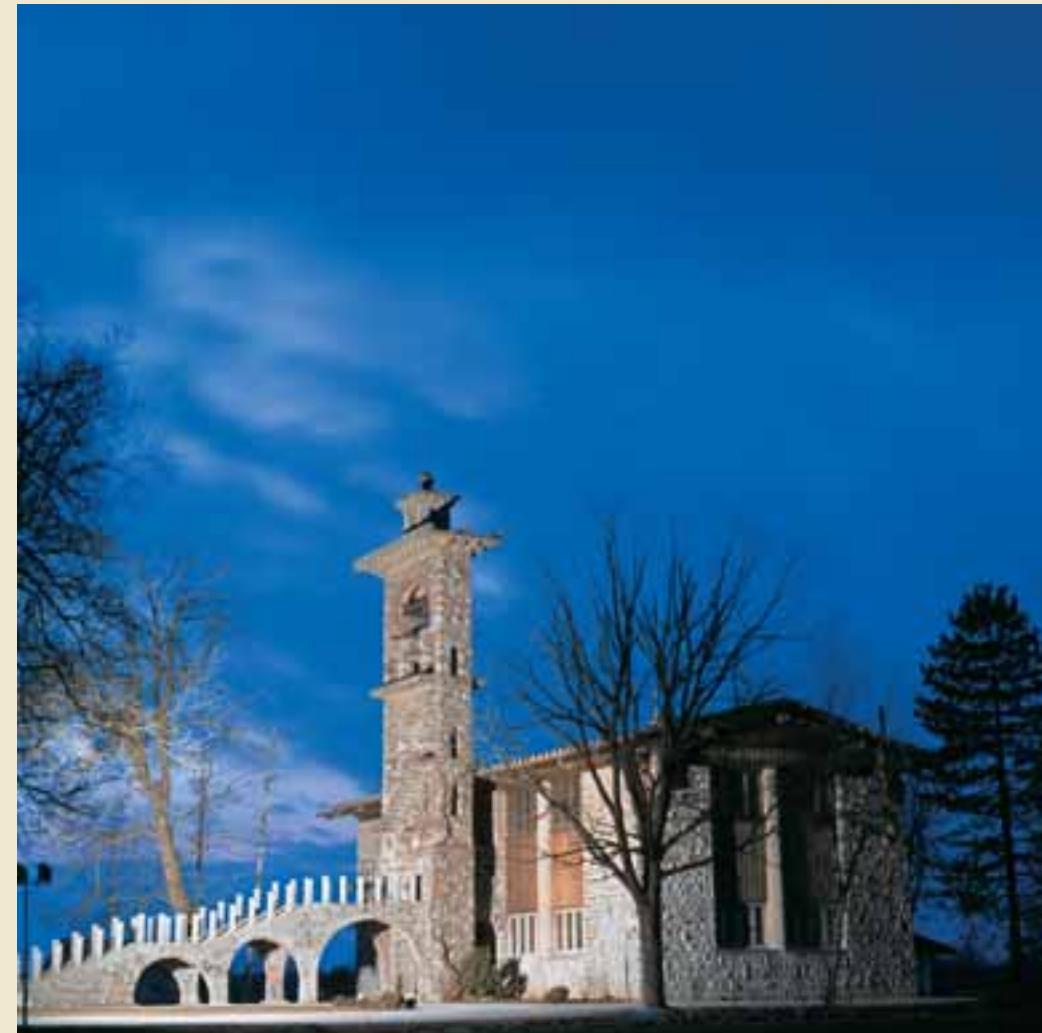




Človek je naselil obrobje Ljubljanskega barja že dolgo pred časom, ko si je prvič drznil stopiti v njegovo osrčje. Obiskovalca pričakajo sledovi človekovega bivanja, dela in duhovnega življenja pravzaprav na vsaki varni vzpetini. Težko se bo ozrl naokrog, ne da bi se njegov pogled ustavil na brezštevilnih romanskih in gotskih cerkvicah, ki pogledujejo v vsakega griča. In vsaj pri dveh Sv. Mihaelih naj zastane njegov korak. V Iški vasi so si pri graditvi vaške cerkve pomagali z materialom, ki je bil najbolj pri roki - rimskimi nagrobniki. Sredi Črne vasi, kraju, ki je svoje ime dobilo po hišah, zaščitenih s črno barjansko zemljo, pa je mojster Jože Plečnik ustvaril čipkasto mojstrovino iz belega kamna.



Man had settled on the margins of Ljubljansko Barje long before venturing into its heart for the first time. The visitors can see traces of the people's habitation, work and spiritual life virtually on every safe elevation. They will in fact find it quite difficult to look around without letting their eyes dwell on numerous Romanesque and Gothic little churches standing on every hillock. And at least at two Churches of St. Michael they should well shorten their stride. At Iška vas, for example, the builders of the village church helped themselves with material nearest at hand - the Roman tombstones! In the middle of Črna vas, the place that was given its name after houses protected with the black palustrine soil, the great architect Jože Plečnik created a lace-like masterpiece out of white stone.





#### Legenda / Legend

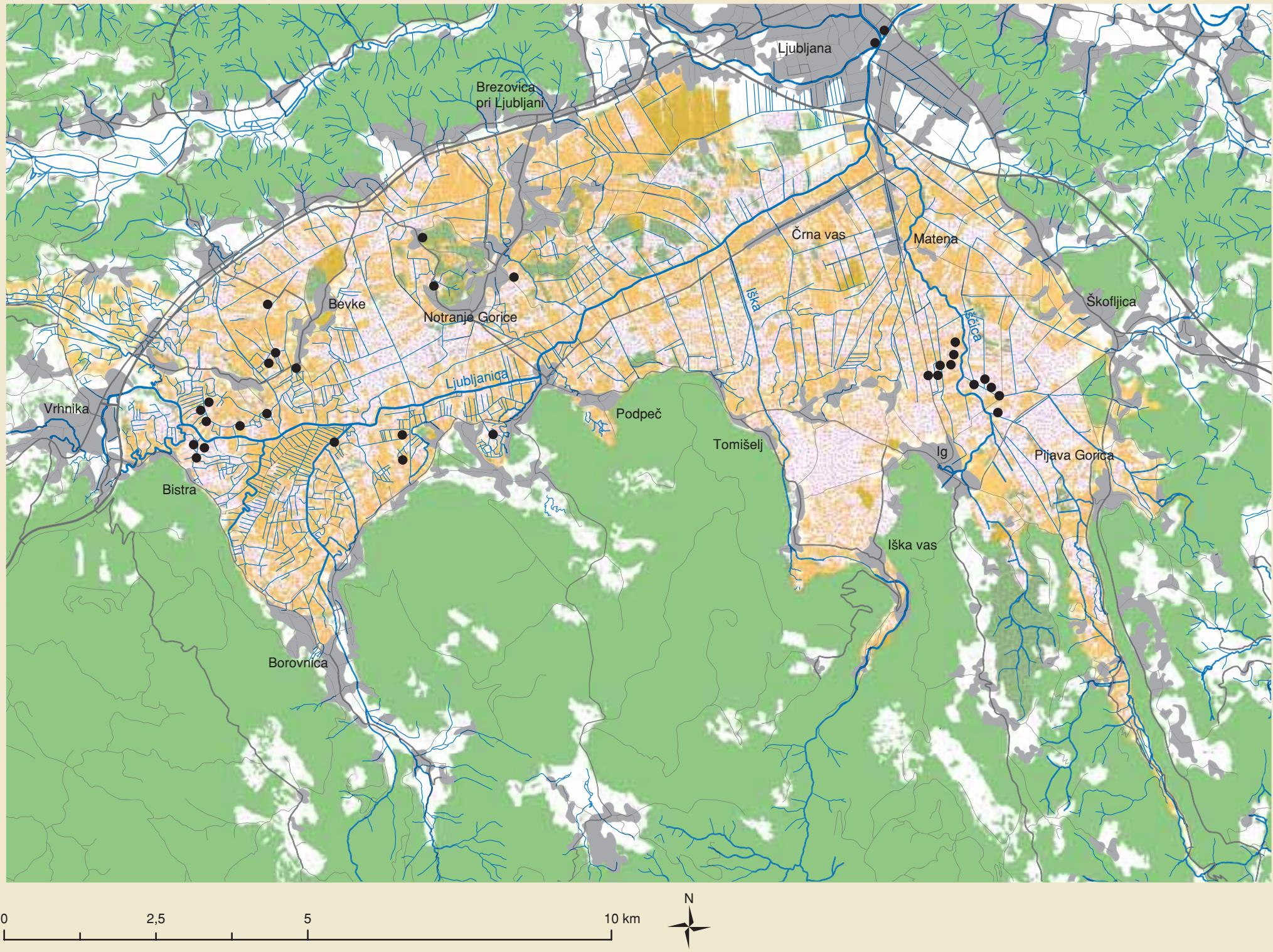
- Kolišča / Pile dwellings
- Habitatni tipi z Direktive o habitatih / Habitat types from Habitat Directive

- Območje Natura 2000 (predvidena meja Krajinskega parka Ljubljansko barje) / Natura 2000 site (proposed border of the Landscape park Ljubljansko barje)

Izdelava karte / Cartography  
Center za kartografijo favne in flore

Viri / Sources  
Center za kartografijo favne in flore  
Ministrstvo za okolje prostor in energijo, Agencija RS za okolje  
Univerza v Ljubljani, Filozofska fakulteta, Oddelek za arheologijo

Merilo / Scale  
1:100.000







Zadnjih nekaj tisoč let se je okolje Ljubljanskega barja burno spremenjalo. Od plitvega jezera prek močvirja do kulturne krajine z nekaterimi elementi mokrišč, kakršna je podoba danes. Skupaj s podobo pokrajine se je spremenjala tudi narava. Nekatere rastlinske in živalske vrste so izginjale, naseljevale so se nove, bolj prilagojene novim življenjskim razmeram. V času količarjev je bil redni gost plitkega barjanskega jezera pelikan. Pred začetkom osuševalnih del so močvirje naseljevali žerjavci in gosi. Spremembe so bile počasne in narava jim je z lahkoto sledila ter ohranjala svojo pestrost. Vse do današnjih dni, ko na Ljubljanskem barju, v kulturni krajini, še vedno beležimo zavidljivo biotsko pestrost. Toda, kako dolgo še?

In the last few millennia, the environment of Ljubljansko Barje has undergone some stormy changes: from the shallow lake to the cultural landscape with some wetland elements, as is its image today. The changes, however, affected not only the landscape, but nature as well. Some plant and animal species disappeared, while others, better adapted to the new life conditions, settled here for the very first time. One of the regular guests of the shallow Ljubljansko Barje lake at the time of pile dwellers was the pelican. Prior to the initial land drainage, the moors were inhabited by cranes and geese. But the changes were slow and nature followed them with ease and managed to retain its diversity. And so has been till these very days, when enviable biodiversity can still be noted in the Ljubljansko Barje's cultural landscape. But, for how long?





Barjanske ravnice je za dobrih 15 tisoč hektarov. Prave barjanske šote je ostalo le še za vzorec, zato barjanske naravne vrednote niso skrite v bornih ostankih preteklosti, pač pa v bogati kulturni krajini. Krajina je na Ljubljanskem barju ohranila svoj tradicionalni značaj, saj visoka talna voda in redne poplave onemogočajo intenzivno kmetijsko obdelavo oziroma zmanjšujejo njegovo ekonomsko uspešnost. Ljubljansko barje je danes neskončen mozaik travnikov, steljnikov, njiv, jarkov in mejic, preplet vseh teh različnih živiljenjskih okolij pa zagotavlja bivališče mnogim rastlinam in živalim, ki jih drugod po Sloveniji in Evropi le še redko srečamo.



The Ljubljansko Barje plains cover a good 15,000 hectares. As the true palustrine peat has almost gone, the Ljubljansko Barje's natural values are not hidden in the scanty remains of the past but in the rich cultural landscape. At Ljubljansko Barje, the latter has retained its traditional character, for the high groundwater level and regular floods prevent intensive farming and reduce its economic efficiency. Today, the Ljubljansko Barje is an endless mosaic of grasslands, litter woodlands, fields, ditches and hedges, while the interlacement of all these diverse habitats is home to numerous plants and animals that can rarely be still seen elsewhere in Slovenia and Europe in general.



Čeprav barjanska ravnica pokriva komaj odstotek slovenskega ozemlja, gnezdi na njej polovica vseh slovenskih vrst ptic, okoli sto jih je. Velikosti njihovih populacij dosegajo tudi dvajset in več odstotkov celotne slovenske populacije. Še številnejše so tiste vrste ptic, ki na Ljubljanskem barju prezimujejo ali pa se tu ustavijo na svoji poti v toplejše kraje. Za njihovo pestrost in število so najbolj zaslužni vlažni travniki, tisti, ki jih osuševalna dela še niso spremenila v plodne njive in zaradi česar jih lastniki še vedno negujejo na tradicionalen, ekstenziven način. Neredno, pozno košeni in brez dodatne pomoči različnih gnojil. Takšni so idealno življensko okolje ne le za ptice, marveč še za številne druge vrste, poleg tega pa so prava paša za oči.

Although the Ljubljansko Barje plains cover no more than 1 % of Slovene territory, a half of all Slovene birds are known to breed there - about a hundred of them. At the Ljubljansko Barje, the sizes of their populations reach twenty and even more percent of the entire Slovene population. Even more numerous are the birds that overwinter or stop here during migration. The most deserving for their diversity and numbers are the wet meadows - those that have not yet been transformed into arable land due to land drainage and are still being farmed and mown in traditional, extensive way: irregularly, late and without additional aid of various fertilisers. As such, they are an ideal habitat not only for birds but for many other species as well, and are, on top of it all, most pleasing to our eyes.

Siva čaplja / Grey Heron / *Ardea cinerea*

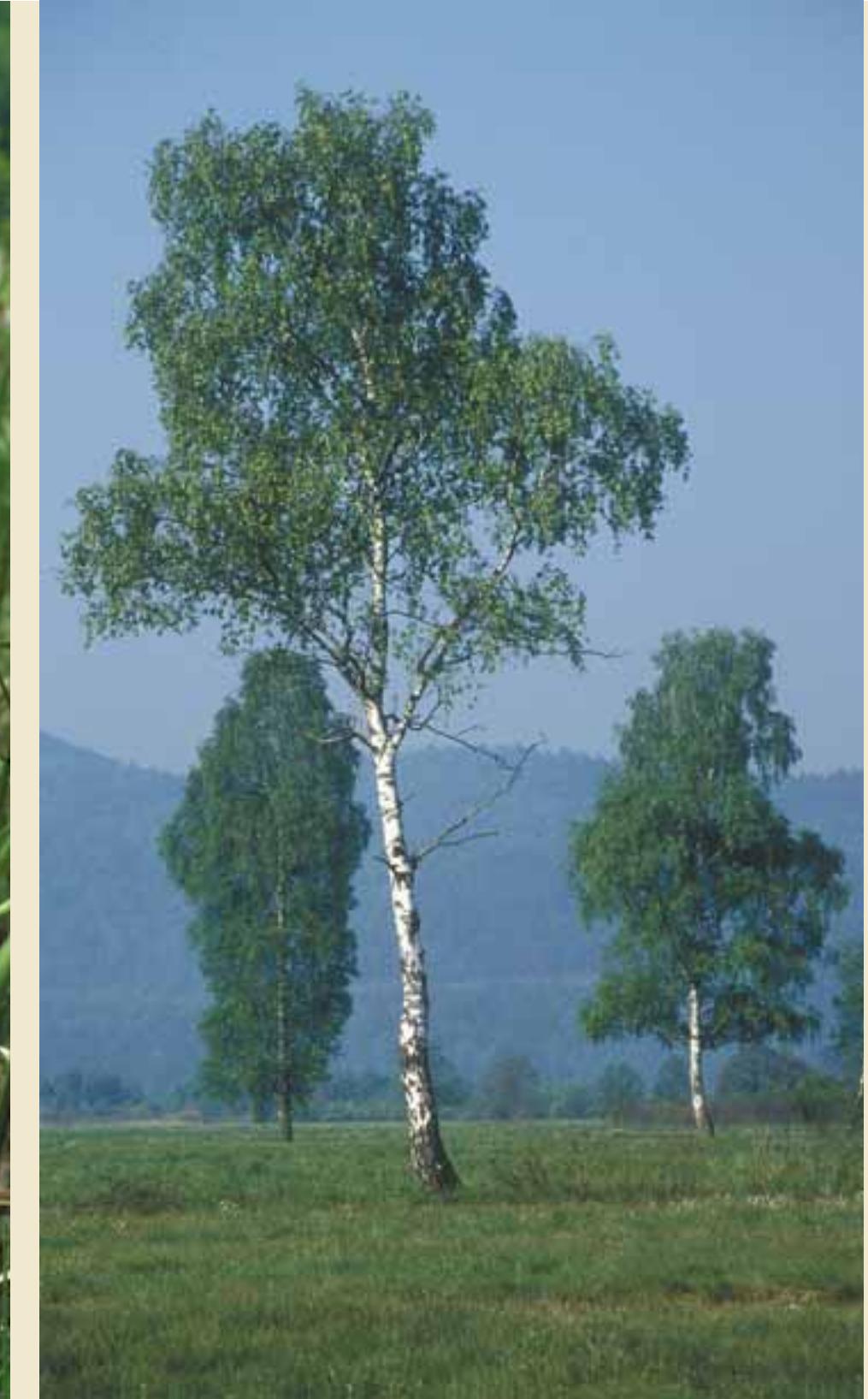


Kosec / Corn Crake / *Crex crex*



Veliki škurh / Eurasian Curlew / *Numenius arquata*





Barjanski travnik je zelen le kratek čas, saj ga že zgodaj spomladi prekrije temno rdeča preprogna močvirskih logaric (*Fritillaria meleagris*) in bleščeče rumene kalužnice (*Caltha palustris*). Kasneje na njih vzniknejo bela soplodja muncev (*Eriophorum spp.*), rožnate kukavičje lučce (*Lychnis flos-cuculi*) in baldrijan (*Valeriana officinalis*). Med njimi vzcveti več vrst travniških orhidej, mesnordeča kukavica (*Dactylorhiza incarnata*), pegasta prstasta kukavica (*Dactylorhiza maculata*), močvirska kukavica (*Orchis palustris*) in navadni kukovičnik (*Gymnadenia conopsea*), ponekod pa tudi še evropsko ogrožena Loeselijeva grezovka (*Liparis loeselii*). Poleti cvetovi čistca (*Betonica officinalis*) obarvajo travnike rdeče in kot zadnji, na jesen, zacvetijo nežni, beli cvetovi močvirske samoperke (*Parnassia palustris*). Pisane barve dopolnjujeta cvrčanje žuželk in petje ptic.



Vodna perunika / Yellow Flag / *Iris pseudacorus*



Vodna grebenika / Water-violet / *Hottonia palustris*



Loeselijeva grezovka / Fen Orchid / *Liparis loeselii*



The meadows of Ljubljansko Barje are green for a rather short period, as in early spring they are overlaid by a dark red carpet of Snake's head Fritillary (*Fritillaria meleagris*) and glittering yellow Marsh Marigolds (*Caltha palustris*). Later on, they are filled with white infructescences of Cottongrass (*Eriophorum spp.*), Ragged Robin (*Lychnis flos-cuculi*) and Valerian (*Valeriana officinalis*). Amongst them, several species of meadow orchids burst into blossom, such as Early Marsh Orchid (*Dactylorhiza incarnata*), Spotted Orchid (*Dactylorhiza maculata*), Lax-flowered Marsh Orchid (*Orchis palustris*), Fragrant Orchid (*Gymnadenia conopsea*) and, in places, at the European level endangered Fen Orchid (*Liparis loeselii*). During the summer, the flowers of Betony (*Betonica officinalis*) tinge the Ljubljansko Barje meadows red, while in the autumn, the gentle white flowers of Bog Star (*Parnassia palustris*) begin to bloom as the last one in the year. All these variegated colours are supplemented by the chirping of insects and singing of birds.

Grintavčev pisanec / Marsh Fritillary / *Euphydryas aurinia*

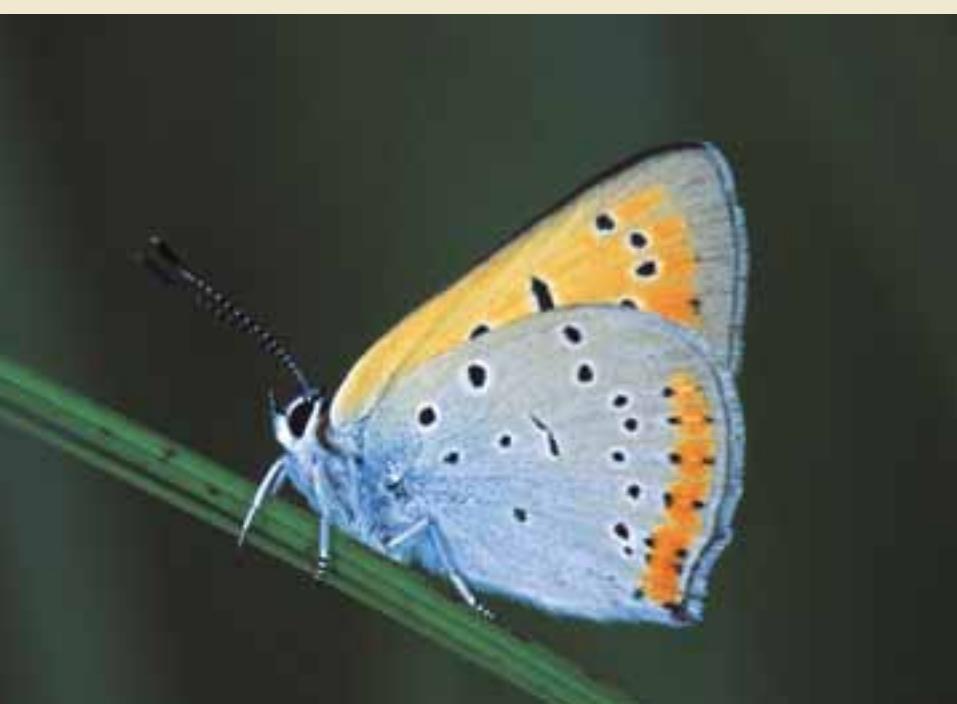


Strašničn mrvljiščar / Scarce Large Blue / *Maculinea teleius*



Vlažne travnike naseljuje veliko število pisanih metuljev, kar devetinosemdeset vrst. Kot mnoge druge vrste je njihov obstoj vezan predvsem na negnojena travišča. Nekatere vrste metuljev so na Ljubljanskem barju močno razširjene, kar velja predvsem za srebrnolisega bisernika (*Clossiana selene*), močvirskega pisančka (*Melitaea diamina*) in močvirskega cekinčka (*Lycaena dispar*). Strašničn mrvljiščar (*Maculinea teleius*) in sviščev mrvljiščar (*Maculinea alcon*) imata večje zahteve, saj sta vezana na zgolj eno vrsto hranilne rastline (veliko strašnico oziroma močvirski svišč) in določeno vrsto gostiteljskih mravelj, ki so glavna hrana gosenic teh metuljev.

Wet meadows are inhabited by numerous species of gaily-coloured butterflies - there are no less than eighty-nine of them. As in many other butterflies, their existence is closely associated with unfertilised grasslands. At Ljubljansko Barje, some butterfly species are very common indeed, such as Small Pearlbordered Fritillary (*Clossiana selene*), False Heath Fritillary (*Melitaea diamina*) and Large Copper (*Lycaena dispar*). The Scarce Large Blue (*Maculinea teleius*) and Alcon Blue (*Maculinea alcon*) have greater demands, for they totally depend on a single nutrient plant species (Great Burnet and Marsh Gentian respectively) and on certain species of host ants, which are the main diet of their caterpillars.



Močvirskega cekinček / Large Copper / *Lycaena dispar*



Zdravilna strašnica / Great Burnet / *Sanguisorba officinalis*

Na Ljubljanskem barju najdemo še zadnje močnejše populacije močvirskega debeloglavca (*Carcharodus flocciferus*), pojavlja pa se celo barjanski okarček (*Coenonympha oedippus*). Slednji sodi med sedem kritično ogroženih vrst metuljev v Evropi. Skupaj s pozno, v juliju in avgustu košenimi vlažnimi travnišči, ki so jih zamenjali osušeni, intenzivno obdelani in gnojeni travniki in njive, je populacija izginil v Španiji, Nemčiji, Belgiji, Češki, Slovaški in Bolgariji, zato velja za najbolj ogroženo vrsto med evropskimi dnevnimi metulji. Na vlažnih travnikih ta slab letalec, ki se najraje zadržuje med vegetacijo, srka nektar le s cvetov srčne moči (*Potentilla erecta*). Nekaj osamljenih populacij najdemo le še na vzhodnem delu Ljubljanskega barja, kjer jajčeca in gojenice prezivijo na nepokošenem rastlinju ali na pokošeni travi, ki je nedostopna za odvoz s kmetijsko mehanizacijo.

At Ljubljansko Barje, the last larger populations of Tufted Marbled Skipper (*Carcharodus flocciferus*) can be found. At places we can still chance upon False Ringlet (*Coenonympha oedippus*), the small brown butterfly from the list of seven critically endangered butterfly species in Europe. Together with wet grasslands, which used to be mown as late as in July and August but have been replaced by drained and intensively farmed and fertilised meadows and fields, it has totally disappeared from Spain, Germany, Belgium, Czech Republic, Slovakia and Bulgaria, and is now considered the most endangered European butterfly species. This poor flier, which prefers to keep close to vegetation, sips nectar in wet meadows only from Tormentil's flowers (*Potentilla erecta*). Some of its isolated populations can be seen only in the eastern part of Ljubljansko Barje, where eggs and caterpillars manage to survive on unmown plants or mown grass that cannot be accessed and taken away by agricultural machinery.



Barjanski okarček / False Ringlet / *Coenonympha oedippus*



Na barjanskih travnikih, v mejicah in nizkem grmičevju kaj hitro lahko opazimo ali slišimo najznačilnejše barjanske vrste ptic. Kosec (*Crex crex*), veliki škurb (*Numenius arquata*), prepelica (*Coturnix coturnix*), sloka (*Scolopax rusticola*), veliki skovik (*Otus scops*), repaljščica (*Saxicola rubetra*), kobiličar (*Locustella naevia*) in pepelasti lunj (*Circus cyaneus*) pa so tiste, ki sodijo na sezname najbolj ogroženih v evropskem in svetovnem merilu, a jih na Ljubljanskem barju še lahko srečamo dokaj pogosto. Kar seveda ne pomeni, da jih tudi tu ne čaka podobna usoda, kot so jo na Ljubljanskem barju v zadnjih desetletjih doživelji črnočeli srakoper (*Lanius minor*), smrdokavra (*Upupa epops*) in kozica (*Gallinago gallinago*). Izginila je tudi pomembna, v Srednji Evropi zadnja kolonija južne postovke (*Falco naumannii*). Tudi druge, bolj prilagodljive vrste vztrajno izgubljojo bitko s človekom in njegovim vse večjim apetitom po prostoru, kjer so kraljevale še nedavno.



In the meadows, hedges and low shrubbery of Ljubljansko Barje one can quickly notice or hear some of the most characteristic wetland bird species. Corn Crake (*Crex crex*), Eurasian Curlew (*Numenius arquata*), Common Quail (*Coturnix coturnix*), Eurasian Woodcock (*Scolopax rusticola*), Scops Owl (*Otus scops*), Whinchat (*Saxicola rubetra*), Grasshopper Warbler (*Locustella naevia*) and Hen Harrier (*Circus cyaneus*) are those that have been included on the list of most endangered species in Europe and worldwide, but can still be seen fairly often in this part of the country. Which of course does not mean that they will not share the fate of Lesser Grey Shrike (*Lanius minor*), Hoopoe (*Upupa epops*) and Common Snipe (*Gallinago gallinago*), which have disappeared from Ljubljansko Barje in the last decades, the same as the last and therefore most important colony of the Lesser Kestrel (*Falco naumannii*) in Central Europe. Furthermore, there are some other more adaptable species that are persistently losing their fight against man and his ever-increasing appetite for the territory where these birds have reigned supreme not so long ago.

Avtocesta proti Vrhniku in južna ljubljanska obvoznica sta Ljubljanskemu barju iztrgali nekaj sto hektarjev, ali okoli 200 gnezd repaljščic (*Saxicola rubetra*), 250 gnezd drevesnih cip (*Anthus trivialis*) in 300 gnezd poljskih škrjancev (*Alauda arvensis*).

The Ljubljana - Vrhnik motorway and southern Ljubljana bypass have deprived the Ljubljansko Barje of few hectares of land or 200 Whinchat's nests (*Saxicola rubetra*), 250 Tree Pipit's (*Anthus trivialis*) nests, and 300 Sky Lark's nests (*Alauda arvensis*).



Veliki škurb / Eurasian Curlew / *Numenius arquata*

Kosca, globalno ogroženo ptico, ki gnezdi na Ljubljanskem barju, bomo prej slišali kot videli, saj se ves čas skriva v travniškem rastju. Prepoznali ga bomo po značilnem oglašanju "krrek-krrek", s katerim samec v pomladanskih in poletnih nočeh vabi samico v svatbeni objem. Kosci najraje naseljujejo spomladi dalj časa poplavljene travnike, ki jih njihovi lastniki kosijo precej pozno. Na barjanskih travnikih gnezdi kar štirideset odstotkov slovenske populacije te ptice, ki je iz večine evropskih držav že izginila, medtem ko so na Ljubljanskem barju ornitologi našteli še okoli 200 pojočih samcev. Vendar tudi tu njihovo število upada, saj njegova gnezda ogrožajo zgodnja košnja, uporaba težke kmetijske mehanizacije, opuščanje košnje in zaraščanje.

*Kosec (Crex crex) je latinsko ime dobil na osnovi svojega značilnega oglašanja. Njegovo slovensko poimenovanje izhaja iz podobnosti njegovega oglašanja z zvokom brušenja kose z oslo.*

*Corn Crake (Crex crex) was given its Latin name on the basis of its characteristic rasping calling. Its Slovene name, i.e. kosec (scytheman), derives from the similarity of its calling to the sounds of a scythe being sharpened by a whetstone.*



Corn Crake, this globally endangered species that breeds at Ljubljansko Barje, will be sooner heard than seen, for it constantly hides in grassland vegetation. We shall recognise it by its characteristic and persistent calling "errp-errp" or, if you like it, "crex-crex", with which the male invites, in spring and summer nights, the female to be locked in a loving embrace. In spring, Corn Crakes love to inhabit the meadows that have been inundated for a longer period of time and are mown fairly late. In the meadows of Ljubljansko Barje breed no less than forty percent of the Slovene population of this bird that has already disappeared from the majority of European countries, while at the Ljubljansko Barje ornithologists have counted around 200 singing males. Unfortunately, their numbers are decreasing here as well, for their nests are threatened by early mowing, use of heavy agricultural machinery, abandoned mowing, and overgrowing.





Obilje vode, predvsem pa obsežna mreža odvodnih kanalov in jarkov z bogato razvito vodno vegetacijo so dom lesketajoče pisanih, spretnih letalcev - kačjih pastirjev. Med 48 vrstami kačjih pastirjev, ki živijo na Ljubljanskem barju, mnoge sodijo med ogrožene, na Ljubljanskem barju pa so njihove populacije še dokaj številčne.

V pomladnih nočeh na Ljubljanskem barju živahno odmeva regljanje zelenih reg. Preplet različnih tipov tekočih in stoječih voda je izjemno pomemben za številne dvoživke. Na Ljubljanskem barju bomo našli kar 70 odstotkov vseh vrst, ki živijo v Sloveniji, med njimi hrbskega urha (*Bombina variegata*), velikega pupka (*Triturus carnifex*), zeleno rego (*Hyla arborea*) in zeleno krastačo (*Bufo viridis*). Dvoživke, ki imajo raje gozd, pa z vsakoletnimi pohodi čez ceste na barjanskem robu opozarjajo, da je Ljubljansko barje zanje pomembno mesto za mrestenje.



Močvirška sklednica / European Pond Terrapin / *Emys orbicularis*



Koščični škratec / Ornate Damselfly / *Coenagrion ornatum*





Pisatelj Janez Jalen je Ljubljansko barje vcepil v zavest Slovencev skozi svoj zgodovinski roman o mostičarjih "Bobri". Ti spretni graditelji jezov, sicer tudi kar pogosto na količarskih krožnikih, so bili skupaj z velikimi vodami z Ljubljanskega barja pregnani že davno. Vidra (*Lutra lutra*) je še vedno pogost prebivalec Ljubljanskega barja, kljub temu da bomo danes precej bolj pogosto ob vodi srečali pižmovko (*Ondatra zibethicus*), ki jo je človek zaradi krvna raznesel po vsem svetu. Poleg manjših sesalcev, pretežno glodalcev in žužkojedov, Ljubljansko barje zaradi obilja hrane pogosto privabi tudi ogrožene in zavarovane netopirje male podkovnjake (*Rhinolophus hipposideros*) - obiskovalce iz dinarskih gozdov, ki se raztezajo na njegovem južnem obrobju.

Mali podkovnjak / Lesser Horseshoe Bats / *Rhinolophus hipposideros*



Srna / Roe Deer / *Capreolus capreolus*



Vidra / European Otter / *Lutra lutra*



The Slovene writer Janez Jalen instilled Ljubljansko Barje into the minds of Slovene people through its history novel about pile dwellers "Bobri" (Beavers). As far as these animals, skilful dam builders and among those that were quite often on the plates of pile dwellers, are concerned, they were driven away from the Ljubljansko Barje, together with high waters, ages ago. The Otter (*Lutra lutra*) is still a fairly common inhabitant of the Ljubljansko Barje, although nowadays we are much more likely to meet the Muskrat (*Ondatra zibethicus*), which has been due to its fur spread, by man, all over the world. Apart from some smaller mammals, mostly rodents and insectivores, the Ljubljansko Barje also often attracts, owing to the abundance of food, endangered and protected Lesser Horseshoe Bats (*Rhinolophus hipposideros*), the visitors from Dinaric forests that spread along its southern margins.



Močvirska logarica / Snake's head Fritillary / *Fritillaria meleagris*

Na Ljubljanskem barju je narava lahko tisočletja sledila spremembam, ki jih je s svojo dejavnostjo povzročal človek. Skoraj čudežno je, da je vsem posegom navkljub ostala izjemno pestra vse do danes. A kaže, da se to sožitje počasi končuje. Človekovi posegi v največje slovensko mokrišče in najjužnejše evropsko visoko barje postajajo vse bolj agresivni. Globoki, redno čiščeni osuševalni jarki. Vsak dan nova, okolju in terenu neprilagojena stanovanjska poslopja. Intenzivno obdelovane, z gnojili vseh vrst zasute kmetijske površine. Smetišča in nasutja gradbenega materiala. Letališče za lokalne veljake. Sprehajalci s psi, rekreativci na kolesih, turisti v balonih. Kdor opozarja, postane sovražnik napredka.



At Ljubljansko Barje, nature could have followed the changes caused by man and his activities for thousands of years, and it is almost a miracle that in spite of all these pressures it has remained exceptionally diverse till this very day. It looks, however, that this cohabitation is slowly coming to an end. The fact is that human encroachment upon this largest Slovene and southernmost European raised bog is becoming increasingly aggressive. Deep, regularly cleaned drainage channels. Each day new and to this environment unadapted residential buildings. Intensively farmed land, filled with fertilisers of all kinds. Rubbish tips and discarded building materials dumped there. Airfield for the local men of note. Strollers with their dogs, recreationists on bikes, tourists in huge balloons. And all those that openly point at these facts, suddenly become the enemies of progress.



Območja, kot je Ljubljansko barje, so v svetu vse redkejša. Zadnja desetletja je v Evropi izginilo sedemdeset odstotkov mokrišč. Z živalmi in rastlinami vred, tako kot številna druga naravna območja. Kolateralna škoda napredka, pač. Z vstopom Slovenije v Evropsko unijo se je država zavezala k spoštovanju dveh naravovarstvenih direktiv, ki opredeljujeta posebna ohranitvena območja narave, območja Natura 2000, med katera sodi tudi celotno Ljubljansko barje. Minimalna zahteva je ohraniti ugodno stanje habitatov in vrst, ki živijo na tem območju, in preprečiti nadaljnje poslabšanje razmer.

Toda Ljubljanskega barja ne varujmo zavoljo bruseljskih birokratov. Varujmo ga zase!

The areas of the Ljubljansko Barje type are becoming increasingly rare all over the world. In the last few decades, seventy percent of wetlands have disappeared in Europe, together with their animals and plants, the same as many other natural districts. Collateral damage, of course! When Slovenia joined the EU, it bound itself to respect two nature conservation directives with designation of special protection areas and special areas of conservation, i.e. Natura 2000 sites, which include the entire territory of Ljubljansko Barje. The directives' minimal demands are to preserve the favourable state of habitats and species living in these areas and to prevent further deterioration of the existing conditions there.

Anyhow, Ljubljansko Barje should not be protected only for the sake of Brussels bureaucrats. Let's protect it for ourselves!





Le Ljubljansko Barje, ce marais de Ljubljana, vaste de près de 160 km<sup>2</sup>, a trouvé naissance voici près de deux millions d'années suite à l'effondrement d'une large partie du bassin de Ljubljana. De ce fait, les rivières locales y ont déposé de grandes quantités d'embâcles et de sédiments, isolant par un véritable barrage la rivière Ljubljanica à l'endroit de sa confluence avec la Save et inondant en même temps le bassin du Barje. Il y a quelque 6000 ans, le lac du Barje s'assécha, laissant une plaine marécageuse dont une grande partie vit la formation de couches de tourbe, parfois épaisses de 9 mètres.

Bien que cette zone tourbeuse ne fût pas l'endroit idéal pour une colonisation humaine, de nombreuses trouvailles archéologiques attestent que le Ljubljansko Barje fut peuplé depuis l'Age du Cuivre. C'était l'époque de remarquables maisons sur pilotis et de cultures avancées, aux technologies développées, en relation avec d'amples courants européens. Leurs poteries et objets en cuivre étonnent encore les amateurs de belles choses.

Les inondations régulières subies par le Ljubljansko Barje expliquent les tentatives séculaires d'assèchement. Les premiers qui tentèrent de dompter et de s'approprier le Barje furent les Romains, qui y bâtirent la première route transversale et régulèrent le cours de la rivière Ljubljanica afin de pouvoir y transporter le marbre de Podpeč, nécessaire à la construction de la ville d'Emona (l'actuelle Ljubljana). Les velléités de drainage s'intensifièrent au XVI<sup>e</sup> siècle, où les premiers canaux furent bâties. Le travail le plus notable, bien que peu couronné de succès, fut celui de Gabriel Gruber à la fin du XVIII<sup>e</sup>. Ces essais répétés de drainage, approfondissant les lits et canaux, abattant les digues de la Ljubljanica et construisant de nouveaux canaux, amenèrent un premier succès au XIX<sup>e</sup> siècle, lorsque le niveau d'eau fut devenu suffisamment bas pour permettre la colonisation et les labours dans la plaine du Barje. Mais, en fait, l'extraction et la vente de tourbe s'avérèrent plus rentables que l'agriculture ! L'exploitation de la tourbe causa un affaissement du sol, ce qui engendra de nouvelles inondations. Le combat pour l'assèchement du Barje continua jusqu'au milieu du XX<sup>e</sup> siècle, quand l'idée de créer 'le grenier de l'Europe' disparut même des esprits les plus bornés.

C'est presque un miracle si, en dépit de toutes les tentatives décrises, la nature parvint à se maintenir si riche jusqu'à nos jours. La cohabitation des hommes et de la nature a créé un paysage culturel unique et hautement diversifié, une infinie mosaïque de prés, bois de feuillus, champs, fossés et haies. Les différents habitats imbriqués abritent de nombreux oiseaux, insectes et plantes, rarement retrouvés ailleurs en Slovénie et en Europe. Bien que le Barje ne couvre qu'1% environ du territoire slovène, il est un site de nidification pour près de la moitié des oiseaux de Slovénie, c'est à dire plus de 100 espèces. Les oiseaux de prairies, comme le Râle de genêts, les Tariers pâtre et des prés, le Courlis d'Europe, la Caille ont pu continuer à bâtir leurs nids dans les herbes, mais le combat contre la mécanisation agricole a malheureusement été perdu par la Huppe, la Bécassine des marais, le Faucon crécerelle, la Pie-grièche à poitrine rose, le Hibou des marais et le Busard cendré.

Au bord de l'eau, ou dans les prés fauchés assez tardivement et à la gestion extensive, on peut admirer des papillons rares et des libellules gaiement colorées. Ces milieux marécageux sont un bon refuge pour des amphibiens et pour une très rare tortue, la Cistude d'Europe.

Au Ljubljansko Barje, la nature a pu s'adapter pendant des millénaires aux changements provoqués par l'homme et ses activités, mais il semble que cette cohabitation atteigne progressivement ses limites. En fait, l'acharnement à détruire cette zone humide s'est amplifié; le besoin d'augmenter la production agricole, de construire des complexes résidentiels, industriels et commerciaux, est maintenant incontrôlable.

Le Ljubljansko Barje est la plus vaste zone humide de Slovénie, et l'une des plus méridionales d'Europe. De tels espaces sont de nos jours une vraie rareté en Europe, principalement du fait de l'agriculture intensive et de l'urbanisation. Près de 70% des zones humides européennes appartiennent maintenant au passé. Dans les années 1990, l'Union européenne, certes un peu tard mais tout de même, une législation tendant à protéger les espèces animales et végétales rares et leurs habitats. Le Ljubljansko Barje, qui abrite de nombreuses espèces menacées, a été reconnu comme site Natura 2000.

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