

The Longest and the Deepest Caves in Croati

Prof.dr. Mladen GARAŠIĆ

Croatian Speleological Federation, Nova Ves 66, HR-10000 Zagreb, Croatia

mgarasic@public.srce.hr

Abstract

Here is the list of the longest and the deepest caves and pits in Croatia. In cadaster of the Croatian speleological features (caves and pits) are more than 8650 caves and pits. It is important to say that this cadaster does not contents all the speleological and karst phenomena, but only the speleological features - caves and pits according to the internationally recognised classifications namely, in some speleological cadasters we can find bigger doline, the bigger fissures in the rocks, natural bridges, all the karst springs, under sea springs, and some where even the artificial speleological objects (tunnels, catacombs, old mines, etc.). Also here are conditions for organising speleological expeditions in Croatia proposed by Croatian Speleological Federation, which will help foreign cavers and speleologists in organising such expeditions.

Introduction

In almost 25 years of collecting and sorting the speleological data, with the help of the computers, we managed to make the cadaster of the Croatian speleological objects, that includes more than 8650 caves and pits. It is important to say that this cadaster does not contents all the speleological and karst phenomena, but only the speleological features - caves and pits according to the internationally recognised classifications namely, in some speleological cadasters we can find bigger doline, the bigger fissures in the rocks, natural bridges, all the karst springs, under sea springs, and some where even the artificial speleological objects (tunnels, catacombs, old mines, etc.). The rule of this cadaster is that only treated objects are those in which can be physically entered, in which diving's were done, and not those that are supposed to be connected with some speleological feature, with not enough evidence for that conclusion. Other objects must be added according to the degree of exploring (for example, springs and sinkholes, but only dived through and classified in speleological objects, dolines only when are digged down the connection with some real speleological object, fissures enough widened for entering, etc.). According to geological and hydrogeological characteristics, it can be presumed that there are at least 20000 speleological objects in Croatia, most of them unknown and not explored yet.

There is a list of the 37 deepest and 45 longest caves in Croatia.

The Deepest Pits

In Croatia were explored about 6834 pits or 79 % of all speleological features in Croatian Dinaric Karst area. This means that vertical speleogenesis is more often than horisontal speleogenesis. Here is official list of 37 deepest pits deeper than 250 meters in Croatia (till 31.05.2001.):

| | |
|----------------------------------|--------|
| 1. Lukina jama - Trojama system | 1392 m |
| 2. Slovacka jama | 1301 m |
| 3. Stara skola | 576 m |
| 4. Vilimova jama (A - 2) | 572 m |
| 5. Patkov gust | 553 m |
| 6. Ledena (Ledénica) jama u Lomu | 536m |
| 7. Ponor na Bunjevcu (Bunovcu) | 534 m |
| 8. Jama Olimp I | 531 m |
| 9. Crveno jezero | 528 m |
| 10. Jama pod Kamenitim vratima | 520 m |
| 11. Amfora | 515 m |
| 12. Fantomska jama | 477m |
| 13. Munizaba | 448 m |
| 14. Stupina jama | 413 m |

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| 15. Nova velika jama | 380 m |
| 16. Jama kod Raspora | 361 m |
| 17. Biokovka | 359 m |
| 18. Ponor Pepelarica | 358 m |
| 19. Punar u Luci | 350 m |
| 20. Klementina III | 333 m |
| 21. Podgracisce II (Titina jama) | 329 m |
| 22. Xantipa | 323 m |
| 23. Klanski ponor | 320 m |
| 24. Puhaljka | 320 m |
| 25. Zaboravna jama | 311 m |
| 26. Klementina IV | 300 m |
| 27. Burinka | 290 m |
| 28. Jama Kobiljak | 286 m |
| 29. Kicljeve jame (system) | 285 m |
| 30. Balinka | 283 m |
| 31. Ponor Bregi | 273 m |
| 32. Klementina I | 269 m |
| 33. Jama kod Matesic stana | 260 m |
| 34. Lokvarka | 252 m |
| 35. Pretnerova jama | 252 m |
| 37. Jama Marianna | 250 m |

The Longest Caves

In Croatian Karst area were explored and surveyed about 1718 of caves or 20 % of all known speleological features in this Karst region. This means that in Dinaric karst area, caves are more rare than pits. Also there are about 1 % of caves which have entrances like pits, or pits which have entrances like pits. Their characters are unknown - pits or caves. We called them complex speleological features.

Here is official list of the longest 45 caves (longer than 1 km) in Croatia (till 31.05.2001.):

| | |
|--|---------|
| 1. Dulin ponor (Dula) - Medvedica system | 16396 m |
| 2. Muskinja - Panjkova spilja system | 12385 m |
| 3. Spilja u kamenolomu Tounj | 8487 m |
| 4. Veternica | 7100 m |
| 5. Jopiceva spilja - Bent system | 6570 m |
| 6. Vilinska jama - Ombla cave system | 3063 m |
| 7. Gospodska spilja | 3060 m |
| 8. Donja Cerovacka spilja | 2682 m |
| 9. Slovacka jama | 2414 m |
| 10. Klementina I | 2403 m |
| 11. Mandelaja | 2326 m |
| 12. Munizaba | 2300 m |
| 13. Ponorac - Suvaja (sustav) | 2232 m |
| 14. Spilja za Gromackom vlakom | 2171 m |
| 15. Izvor Gojacke Dobre | 2160 m |
| 16. Ponor Bregi | 2055 m |
| 17. Kotlusa | 2015 m |
| 18. Kaverna u tunelu "Plat" | 1985 m |
| 19. Provala | 1802 m |
| 20. Spilja Miljacka II | 1750 m |
| 21. Markov ponor | 1650 m |
| 22-Ponor Vele vode | 1495 m |
| 23. Kaverna u tunelu "Ucka" | 1490 m |
| 24. Punar u Luci | 1478 m |
| 25. Debela Ljut | 1448 m |
| 26. Strmotica ponor | 1437 m |

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| 27. Sariceva spilja | 1378 m |
| 28. Gornja Cerovacka spilja | 1295 m |
| 29. Ponor Kolinasi | 1278 m |
| 30. Rudeliceva spilja | 1252 m |
| 31. Matesiceva spilja | 1246 m |
| 32. Babina jama | 1230 m |
| 33. Mijatova jama | 1204 m |
| 34. Gatica | 1195 m |
| 35. Hajdova hiza | 1188 m |
| 36. Horvatova (Bezdanjaca pod Vatinov.) | 1176 m |
| 37. Jama kod Raspora | 1106 m |
| 38. Tamnica | 1093 m |
| 39. Jankoviceva spilja mala (ponor Adios) | 1087 m |
| 40. Lukina jama - Trojama system | 1078 m |
| 41. Kicljeve jame system | 1075 m |
| 42. Rujnica | 1052 m |
| 43. Spilja Piskovica | 1036 m |
| 44. Kaverna u tunelu "Velebit" | 1030 m |
| 45. Rokina bezdana | 1016 m |

The Deepest and Longest Sumps

In the caves there are thousands of sumps, several hundreds of them were dived. Here is the list of deepest and longest sumps (deeper than 85 meters and longer than 400 meters) in Croatia.

| | |
|-------------------|--|
| 1. Crveno jezero | (depth 281 m, dive with heliox -181 m) |
| 2. Glavas | (-115 m), dive with heliox |
| 3. Sinac | (-103 m), dive with heliox, |
| 4. Vruja Dubci | (-102,5 m), dive with air, |
| 5. Majerovo vrelo | (depth-93 m, long 450 m), heliox |
| 6. Izvor Kupe | (-86 m), with air |

The Biggest Vertical (pitch)

Croatian Cvaees are rather vertical, and the deepest pitch in one step is 553 meters in Patkov gust pit on Velebit mountain Here is the list of biggest vertivals in caves and pits in Croatia (deeper than 200 meters)

| | |
|-------------------|-------|
| 1. Patkov gust | 553 m |
| 2. Lukina jama | 320 m |
| 3. Podgracisce II | 237 m |
| 4. Lukina jama | 228 m |
| 5. Balinka | 218 m |
| 6. Slovacka jama | 213 m |
| 7. Jama Marianna | 210 m |
| 8. Mamet | 206 m |
| 9. Munizaba | 206 m |
| 10. Stupina jama | 205 m |
| 11. Xantipa | 200 m |

Conditions for Organising Speleological Expeditions in Croatia

Croatian Speleological Federation, as national speleological association is proposing this terms that are following documents accepted by majority of UIS (Union Internationale de Speleologie) members at 12th International Speleological Congress, La Chaux-de-Fondes, Switzerland, 10th August 1997. For organising speleological explorations or visits (speleological expeditions) in Croatia, it is necessary to contact legitimate representative of UIS (association or individual) in the country from which the initiative comes. UIS

representative from such country must send a letter of approval and support in the name of national speleological association (meaning also responsibility) to Croatian UIS representative. In the letter is needed to determine the expedition area, dates and time period, names of the expedition members, their associations, addresses, aims and objectives of the expedition, certifications about life insurance for all members, and certified document about paying eventual speleological rescue in Croatia. Letter must be sent no less than 6 month before expedition, and has to be addressed at:

CROATIAN SPELEOLOGICAL FEDERATION, Nova Ves 66 HR - 10000 Zagreb CROATIA, EUROPE
fax/phone: **385 1 4666 586; **385 1 4668 475; GSM: **385 98 283 657; e-mail: mgarasic@public.srce.hr,
URL: <http://jagor.srce.hr/~mgarasic/speleo.html>

Croatian Speleological Federation will take care for permissions (if such are needed for particular expedition) according to the Croatian Constitution and Laws, and will inform the organiser about it. Simultaneously Croatian Speleological Association will insure detail topographic and geological maps for expedition area. Submitting permissions and topographic (and geological) maps are to be paid by organiser. According to the number of participants, location, objective and other needs, Croatian Speleological Association can order the escort for particular foreign speleological expedition. In Croatia it is forbidden and treated as criminal act to bring out any biological, geological, archaeological or other material from speleological objects (caves, pits and mines). For scientific or other purposes special licence can be issued by authorised Ministries, but the requisition has to be made in advance.

A newly discovered caves and pits - speleological features (without previous names) should be named according to the local toponimes in researched area. Each new cave entrance will get identification number (from Central speleological Cadastre, Croatian Speleological Association) for registration. Organiser should suggest the name but it has to be approved by Croatian Speleological Association. Without such approval none can publish the data about new found caves in Croatia. The leader of the expedition has to inform the Croatian escort and Croatian Speleological Association about the results of expedition in short written report. No later than 6 months after expedition, organiser is obligated to submit complete and detail report (position of the cave or pit, detailed outline, description, photos, and other data) in 2 copies. The future possibilities for certain association to organise such expeditions in Croatia is determined by respectation of this terms. If foreign speleologists are participating in expedition organised by some Croatian speleological societies or clubs, and are invited by Croatian Speleological Federation, they need not apply to Croatian Speleological Federation in order to get permissions, because Croatian organiser will take care of that according to the Constitution and Laws.

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