

Overlooked Armenia Expedition Summary

In all we explored three main areas, which is one more than originally intended after finding out about another exciting area called Hells canyon.

Below is a summary of what we found and what we think the future prospects are for each area should any expeditions wish to follow in our footsteps.

We were joined by a young caver, 20-year old Tigran Armenian, from the Armenian Speleological Team (AST). We were supported by our contact Dr Samvel Shahinyan head of the Armenian Speleological Association, who arranged accommodation and transport to each area.

Area name:	Hell's Canyon
Future prospects	Low/Medium
Total cave surveyed (m)	60 m
Total caves found	We discovered 9 new caves, 4 of which we surveyed.

Hell's canyon is situated near the town of Tigranashen. During the Soviet era, Tigranashen was an enclave of the Azeri Soviet Socialist Republic (SSR) completely surrounded by the Armenian SSR. When the Soviet Union collapsed it became, by default, part of Azerbaijan but was soon invaded by Armenia. Most of the international community continues to recognise Tigranashen as part of Azerbaijan, but it is de facto part of Armenia. Currently, visitors to Tigranashen will encounter no Azeri (or Armenian) security presence and no security problems when visiting. To all intents and purposes it is fully part of Armenia. Having said that, the actual border with Azerbaijan (the Nakhchivan area) is not far away from Hell's canyon and we believe it is essential to take local advice on how close to the border it is advisable to go if you wish to wander that way.

On arrival at the farmer's house after being driven from Yerevan, we soon realised things would be going at a slower pace than what we expected. As what was to become a theme of this expedition our arrival at the farmers house was met by plates and plates of cheese, various pickled veg, lavash (a kind of bread), coffee and lots of vodka! This meant that in each area we visited we effectively lost half a day's time exploring due to this. Armenia is very hospitable but don't expect to get much done on the first day!

Once suitably tipsy we were driven into the valley to get our first look of where we would be exploring over the next two days.

On first glance this rather deep canyon looks fantastic; there are many obvious cave entrances situated at different levels, and lots of limestone. However, we noticed right away that the limestone here is heavily mixed with sandstone sections.

Our approach was to go down to the canyon floor looked as it appeared to have purer limestone, which looked more promising. However no caves of length were found at this level so we had to traipse up the hill to visit all the accessible entrances we could see higher up. As expected due to the rock nothing really came to anything. Our biggest find was a 25m cave which we called Snakes and Ladders, because it had a snake in the entrance and a 8m climb up leading to the another entrance, this appeared to be remnant of a much larger cave, that the river has removed at both ends. The entrance had impressive dimensions of about 10m high and 12m wide.

We spotted an interesting entrance extremely high up, where limestone may be of better quality

which has the potential to be a significant cave, however other than that there does not appear to be lots more to go at, though are entrances we could not access. The entrance was found too late in the day to visit in the 35°C heat.

After leaving Hell's Canyon we spent a day in Areni, looking at known caves. The area had been picked over heavily so we moved on.

Area name:	Gnishik
Future prospects	Medium
Total cave surveyed (m)	70 m
Total caves found	We discovered 8 new caves, of which we surveyed 3.

We then explored another canyon, situated below the village of Gnishik in steep mountainous terrain at 2000 m altitude. After the normal ritual, we were taken down to the start of the canyon. There was a known but unexplored cave called Bezoar cave conveniently near the 4x4 track. Accompanying us were a couple of archaeologists who were quite happy to dig about in the dust in the entrance chamber. We surveyed this cave at 30m long. This cave contained a few bone fragments.

We then walked into the canyon to get a look at it. The rock seemed to be similar to Hell's Canyon, but with more depth potential.

With the exception of Bezoar cave it was again a case of finding lots of small caves. However there was one notable exception, a gargantuan entrance some 50m high! Unfortunately we could not access it. Trying from below would require some difficult rock climbing and from above we soon ran out of rope as we only took the 35m rope spot-holing, I think a 100m rope would be needed. The entrance looks very impressive, but if the other entrances in the area are anything to go by it may not go that far.

There appeared to be some very promising limestone massifs high above us in the nearby mountains. Unfortunately those mountains are on the Azerbaijan border and therefore came with a high risk of being shot, they would also be a very remote place to run an expedition from.

Including the first day we spent two days here. We would have liked to spend longer in this area but Vorotan, the most exciting area and the focus of our expedition, was calling to us.

Area name:	Vorotan gorge
Future prospects	Medium/High
Total cave surveyed (m)	691 m
Total caves found	3 , all of which we surveyed.

As our main objective and focus of the expedition, it was here we allotted the most time of five full days and a further two days traveling. There is no vehicular access to the bottom of the gorge so we used horses to transport our gear from the nearest village, Harzhis. On walking in we could see that

this was a spectacular place, jungle like forests fan there way up the steep sided gorge whose walls tower up to almost 1000 m. We had been promised a new hotel by Samvel. The reality was a tin hut, though it did have a shower for which the water was heated up by a wood-burning stove with a heat exchanger. Our hotelier would stoke up the fire each evening, then everyone had to shower before the fire died down. The hut only had bed space for four people, and an unreliable electricity supply. This could be a problem for larger expeditions, though there is room to camp.

Thankfully, unlike the other areas this one did not let us down. We were told through Tigran that our hotelier and local farmer / hunter, Konstantin, knew of some caves nearby. So the next morning, hung over and a bit ill we were led up a steep mountain side with a gun! It was in-case of bears, apparently. The cave was named Dldnatsak, but we thought he said Duck duck nut sack. Other than him and medieval man this cave was unknown, the entrance was impressive and mist seemed to be flowing out of it. The cave was incredible, and completely different to anything we had found so far. Chambers 25 m wide, hundreds of bats, big passages, many formations and a pitch which made dragging the drill out worthwhile.

We had found what turned out to be the 3rd largest cave in Armenia. We surveyed it at 578m long, which also included some interesting archaeological finds some of which may date to before Christ.

After finishing exploring he took us to another two caves he found near by. These drafted really quite well, but neither were longer than 100 m, the ends blocked by boulder chokes.

From the above you would expect me to say finding more significant caves was very high. However, in two days spent exploring afterwards, not only did we not find any other caves but we also found that the majority of the rock was volcanic or granite. This was very disappointing as it appears from the canyon floor that the rock is pure limestone. Instead, it seems there are only some sections of karst. The gorge runs for many miles in both directions it so it was not possible to explore all of it and there is still possible potential. However, it's very difficult to explore due to steepness and vegetation cover.

Our final objective was to check out the river in the bottom of the gorge. It completely disappears, then reappears 1.4km downstream (visible on Google). Unfortunately the disappearance does not appear to be speleological in nature; the river simply sank gradually into gravel and loose rock.

Some conclusions and general comments

In summary Armenia, a wonderful place, potential for more caves certainly, but huge systems... probably not. Still I hope this will help any future expeditions there. One final comment – when we visited in July the temperature was often well above 30°C. The intense heat was pretty draining when we were out spot-holing. Expeditions may wish to consider visiting at a cooler time of year.

In all discovered a total of **821m** surveyed passage and about 200 more unsurveyed.

Thanks to Ghar Parau for the funding.

Thanks to Petzl for supplying harnesses and brilliant carry bags.

Thanks to Raumer for bolts and hangers without which Dldnatsak would probably not be the 3rd biggest cave in Armenia.

Thanks to Jude and Jonny Latimer for the loan of maillons and a backup Disto.