

Dive team member sheds light on old mining equipment left in Felicitas Mine.

Text and photos by Andrea "Murdock" Alpini. Archive photo courtesy of Wolfgang Röhr

The more time passes, the less the distance is that separates one from the object of one's desire—in this case, it was a place. With time spent seeking, observing, studying, writing and pinning drafts of questions, all waiting for an answer, I decided to follow a line of inquiry into diving an old German slate mine in Schmallenberg (east of Düsseldorf) to understand its feasibility, aesthetic beauty and historical meaning.

Only a few hours separated me from the place where German miners had worked for centuries. My team and I were going to dive this mine, called Felicitas, where hundreds of workers had lived and dreamed for decades, covered by a soft, sooty layer of slate, advancing through tunnels and caressing the black dreams of ancient slate rocks, which coexisted with the personal loneliness of cold water, rocks, forgotten stories and spent breath. We would be descending below the edge of the earth, to move closer to the surface of life. Our story would become just another layer upon those left by the miners of Felicitas Mine

in the past: "The anonymous history is stratified."

Day One

In the morning, we moved out from our

base camp in Hütten. In the last few days, we had measured more than a thousand meters of cave line. We clarified our main targets and the areas of the mine I wished to film. We fixed our checkpoints where

we would drop off cylinders and spots where we would place our directional markers. My caving van was filled with 19 deco cylinders and twinsets, ready to be used in the Felicitas Mine.

Fifty kilometers separated us from our arrival at the mine. As we neared the site, I noticed that the façades of houses were black, as were the roofs. The houses were built in a purely German style

Felicitas Mine

—Diving a German Black Slate Mine



ANDREA "MURDOCK" ALPINI

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Team member brings dive equipment into Felicitas Mine for the dive expedition.

Felicitas Mine

called "Fachwerkhäuser." Looking out the car window, it seemed like we were on top of Golgotha Mountain during an Easter of biblical proportions; the sky was obscured by deep black clouds, in the same color as our surroundings. This black was more than a shadow, it was authoritarian, fascinating, and it absorbed all the rays of opalescent light.

Day Two

Approaching the mine was exciting. As we neared the site, we saw the old road sign that read "Abela Heilstollen" the name later used for the Felicitas Mine. I wished to be there, inside the mine, at the water's edge. As soon as we arrived at the site, I started walking around the ancient barracks. We were surrounded by cornfields.



WOLFGANG RÖHR

Historical archive photo of the Felicitas miners class of 1958

Far away in the distance, at the end of the field on the left, I saw a cement turret rising over the corn plants. It marked the end of the left branch of the mine—one of our main targets. Looking at it and estimating the distance that we would have to cover later, while swimming on open circuit, was impressive. The right branch, also known as "The Old Mine," was closer; that is, it was 530m from the starting point of the dive. Today, we wanted to reach the end of it.

When we got inside the dry part of the mine, everything was the same as it had been left a few decades ago when the mine ceased operations and was sold to a new owner for another business. Slate machinery had been abandoned inside the chamber.



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Our team started to unload the heavy diving equipment from the van. We split the equipment into three groups: my own, my colleague Gianni Cecchi's, and finally, my other colleague Flavio Cavalli's. Flavio was our surface assistant and gas-mixing supervisor (checking regulators, tanks MOD), and last but not least, our interpreter for Wolfgang Röhr, owner of the mine and archival photos.

Our daily plan consisted of three different dives, each one with a different final goal. The very first dive would focus only on setting down our sturdy main line, a 120m length of solid 8mm rope. During the second dive, we would carry six cylinders of safety gas (in the end) and EAN 50 plus oxygen, at 21m and 6m depths, to complete our decompression procedures. At the end of the main line, we came to a T. Turning left brought one directly into the new part of the mine. On the opposite side was the old part of Felicitas Mine.

During our second dive, we explored 270m of old tunnels, leaving directional markers with distances, and clipping safety gas cylinders along the way. We also visited the Santa Barbara—a real bunker where explosives had been stored. A layer of concrete had separated the TNT from the slate tunnel. Inside, the room looked like a bank vault. What I saw in front of my eyes was not so different from the Kaaba in Mecca.

We had placed the stages and markers for our third dive of the day. Now, it was time to come back and start decompression.

At 7:10 p.m., we put our heads underwater again. We left at Flavio's "OK" signal and swam the first 120 meters of the mine; we had to be quick about it to save time for the next part of the dive. We wanted to reach the end of the Old Mine's tunnel.

When we arrived at a fork, we entered an old brick tunnel—a stunning sight. Below us, the ancient rail track slid away. We were now 350m away from the entrance, more or less, and 170m separated us from our "touchdown" goal. Along the way, we observed that many parts had collapsed; sometimes, it was the walls and other times, it was debris that had fallen from the ceiling.

Large ruins marked the area at around 430m. We had to swim another 100m before we reached the farthest end of the old branch of the mine. The ambience of the space was sometimes scary and gloomy. This part of the mine was very tricky and precarious to navigate.

Visiting the right branch of the mine was a great adventure—definitely a "must-see" place in Felicitas. We then returned back to the main T where the path split.

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Stage cylinders were clipped onto the main line in Felicitas Mine by a team member.

Here, I found myself in front of a sacred shrine made of iron. It was a holy place where miners used to pray every day before starting their jobs but also before leaving the mine. On my left, I could see our floating deco cylinders, clipped onto the line. I seemed to struggle between a "holy and profane love."

Day Three

Fifteen minutes to 6:00 p.m. The third dive of the day awaited us in Felicitas. Earlier, in the morning, we had placed the emergency line along the left branch. Large, empty spaces and huge machinery left inside the modern part of the mine characterized this area, which comprised a

main tunnel with additional side chambers. It was in 1997 when Felicitas Mine finally closed down its extractive operations.

My mind drifted back to our earlier dive... We had dived around noon. Our planned bottom time was 50 minutes, just enough time to drop our cylinders for further progression.

Today, we would not explore the mine to the end, so we decided to simulate different diving scenarios instead. We wanted to be ready for the main dive tomorrow.

We spent a lot of time below the Steel Barrel Tunnel, which climbed upwards;



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The dive team with all the dive equipment needed to dive the Felicitas Mine



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the steel here seemed to be very fragile. On top of the barrel, some massive, huge stones covered its roof.

Exiting the Steel Barrel Tunnel and moving to the right, about ten meters ahead, more or less, we found the first of the large-scale empty chambers where slate was mined. To the left of the main path, there was a small storage area; we used its rooftop as cylinder pick-up/drop-off stations. All around us, it was muddy and sometimes silty. Most likely, the silt had been stirred up by unstable rocks that had fallen down.

We continued ahead and later, we went back, passing the same spots again and again, which helped me memorize this place, which was wrapped in darkness. At the end of the day, we calculated that our full length of penetration (and return) was 1,500m, with each of us carrying four to six cylinders at all times, using only our fins to move forward, without the

aid of a diver propulsion vehicle (DPV). The afternoon ran late and the last dive of the day was calling to us, the most demanding one. We needed to drop off the heavy 20-liter tank filled with Helitrox 30/10 at the farthest checkpoint on the map. This was our "home plate."

For the first time, we passed over the final fork. Here, the tunnel was narrow, and we plodded ahead, like a horse in training. Slow thoughts passed through my mind and brought me back to the main T. Another tough scuba diving day in the mine was over.

Day Four

The Big Wednesday had come. We were submerged up to our hips. I switched on my powerful video lights.

No video shooting had taken place on our way in. We had spread our stage tanks with extra gases on the main line during the last two dives, so now it was

time to swim quickly. Today, we wanted to reach the final target: the end of the left branch. Felicitas Mine was awaiting. We had to go west!

Thirty-five minutes had passed when we reached the planned checkpoint: the "anvil" 20l tank of trimix. Now that we had reached it, I thought to myself, we are not too far from "The End." Staying focused on breathing, being calm and relaxed... this was what we had to do. It was a blind tunnel, with no way out and no chance to find a different way back. We had to pay careful attention while we swam and moved forward, as with one wrong frog kick, visibility would quickly drop to zero.

Here, at the end of all the black shadows we had left behind, the slate was simply amazing. A stunning scene and atmosphere surrounded Gianni and me. I filmed the moment, as I knew I would want to relive it again and again later.

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The rocks of Felicitas felt crisp and sharp to us, and we were enthralled by their colors, which ranged from black to yellow, gray to fire-red, and finally to bright light blue. Awesome!

I was breathless, without words.

In front of me there appeared to be two stairways to heaven. The first one was a wooden ladder, and the second one was made of steel now corroded. Climbing these ladders was the only quick exit this mine had. The entrance was 650m away, reaching it during an emergency was impossible on foot, let alone by swimming. Now, it was time to go back.

Day Five: The End

The beginning of the mine corresponded with its end. Miners or divers must walk the same steps before reaching the surface again. When one changed direc-

tion and left the black shadows behind, the darkness swallowed everything on the path.

Only human memory can preserve the spirit of life that had lived here. The mine does not care how powerful the lights that you bring inside its rocky belly are; it will always give you darkness and obscurity in return.

In July 1969, Man left a footprint on the moon. One of the most beautiful memories I collected from Felicitas Mine was the sight of the workers' footprints on the ancient ground. Along the tunnels of the mine, tracks and traces of anonymous miners, pickers and serial drinkers will remain forever, frozen in time.

To return to Felicitas to learn more about its stories and secrets, discover more forks and find more beautiful places to film...

these were my thoughts when I left Germany in the summer of 2020. Diving inside the German slate mine was a human journey through historical, economic and anthropological times.

Goodbye, foreign land. ■

The dive team included Andrea "Murdock" Alpini, Gianni Cecchi and Flavio Cavalli. The team's sponsors included PHY Diving Equipment, Scubatec, Tecnodive, Big Blue Lights and TEMC gas analyzers.

Based in Italy, author Andrea "Murdock" Alpini is a technical diving instructor for TDI, CMAS, and ADIP. Diving since 1997, he is a professional diver focused on advanced trimix deep diving, log dives with open circuit, decompression studies, and research on wrecks, mines and caves. Diving uncommon spots and arranging

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Behind the wooden and corroded steel ladders was raw slate in various colors (above). A shrine of iron (left) was the place in Felicitas where miners used to pray every day before starting their jobs and also when leaving the mine.

dive expeditions, he shoots footage of wrecks and writes presentations for conferences and articles for dive publications and websites such as ScubaPortal, Relitti in Liguria, Nautica Report, SUB Underwater Magazine, Scuba Zone, Ocean4Future and InDepth. He is also member of the Historical Diving Society Italy (HDSI), and holds a master's degree in Architecture and an MBA in Economics of Arts. He is the founder of **Phy Diving Equipment** (phidiving.com), which specializes in undergarments for diving, as well as drysuits, hoods and tools for cave and wreck diving. Among other wrecks, he has dived the Scapa Flow wrecks heritage, Malin Head's wrecks and the HMHS Britannic (-118m), FW58C (-110m), SS Nina (-115m), Motonave Viminale (-108m), SS Marsala (-105m), UJ2208 (-107m) and the submarine U-455 (-119m)—always on an open cir-

cuit system. His first book, Deep Blue, about scuba diving exploration (in Italian) was released in January 2020 (see amazon.it).

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