



The CAVE

The Movie

Text and Photos by Jakub Rehacek, Ph.D

Wes Skiles and his company, Karst Productions, are known for their edge-of-the-seat, hold-your-breath underwater imagery like that in the Antarctic adventure *Ice Island*, the IMAX epic *Journey into Amazing Caves*, and the award winning PBS special *Water's Journey*. So when the call came from Wes one Sunday afternoon, "Can you take 3 months off work?" I didn't have to ask for details, nor did I hesitate to give an enthusiastic affirmative. A three-month block of time with Wes Skiles, renowned underwater filmmaker, could mean only one thing – an exciting adventure!

Wes and his producer Jill Heinerth were assembling a team of cave divers to work as an underwater film unit for a major Hollywood feature film – **The Cave**. The movie, produced by Lakeshore Entertainment and Screen Gems, follows a team of expert cave explorers and scientists who become trapped in an

underground cave system in Transylvania. The group encounters various cave-adapted creatures during their fight for survival.

The movie stars Cole Hauser, Morris Chestnut, Eddie Cibrian, Rick Ravanello, Marcel Iures, Lena Headey, Piper Perabo, Daniel Dae-Kim, Kieran Darcy-Smith. All actors were trained to at least Open Water status by Jill Heinerth in the early stages of the production. Meanwhile, all stunt doubles finished rigorous training on the Megalodon closed circuit rebreathers by Mark Meadows. The production ordered eleven custom-built Megalodon CCRs from the Innerspace Systems Corp. The "Megs" were selected for their ease of operation as well as their ruggedness and durability under the harshest of conditions. They more than lived up to their reputation. All the stunt divers had to complete 50 hours of diving between the end of training and start of filming.

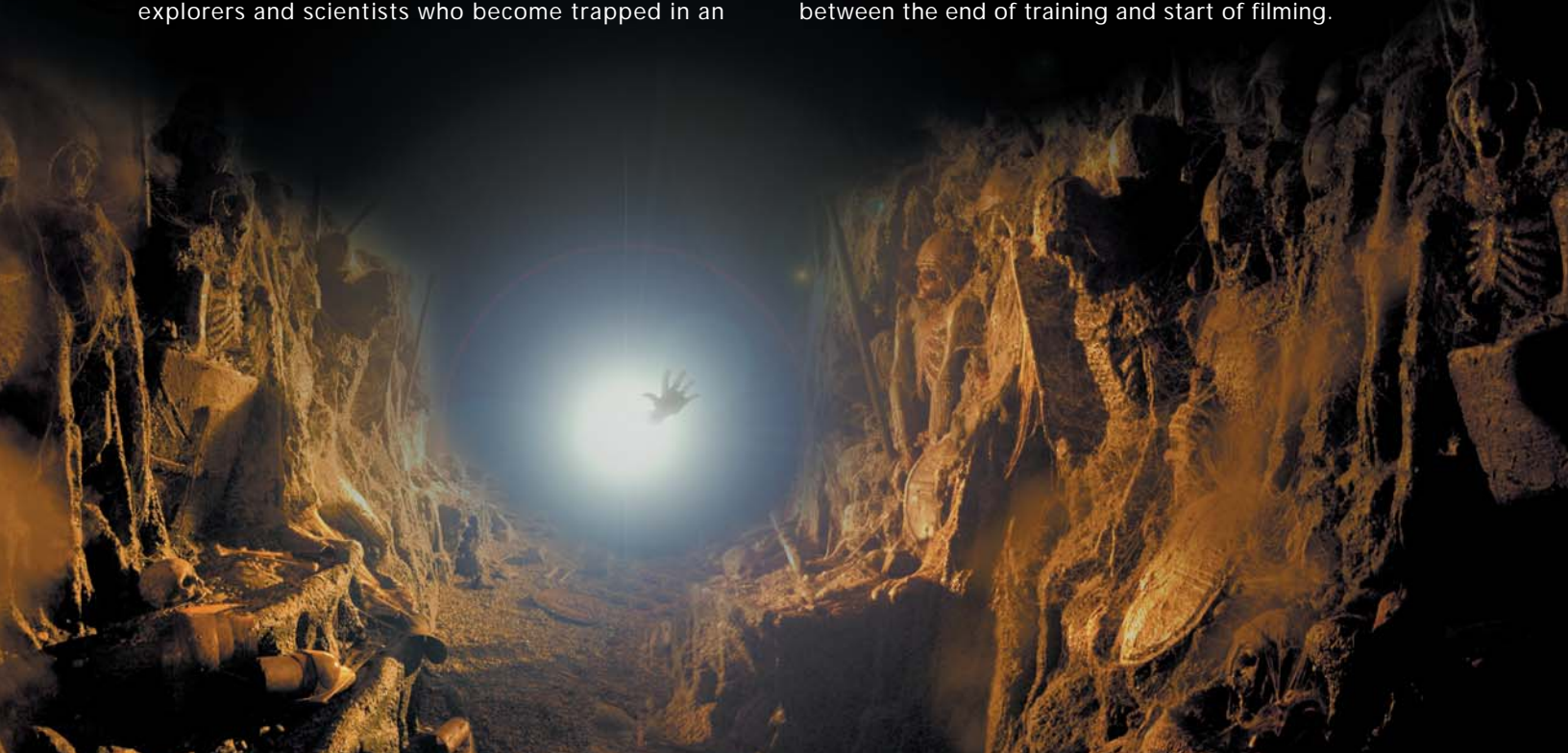


Photo by Wes Skiles

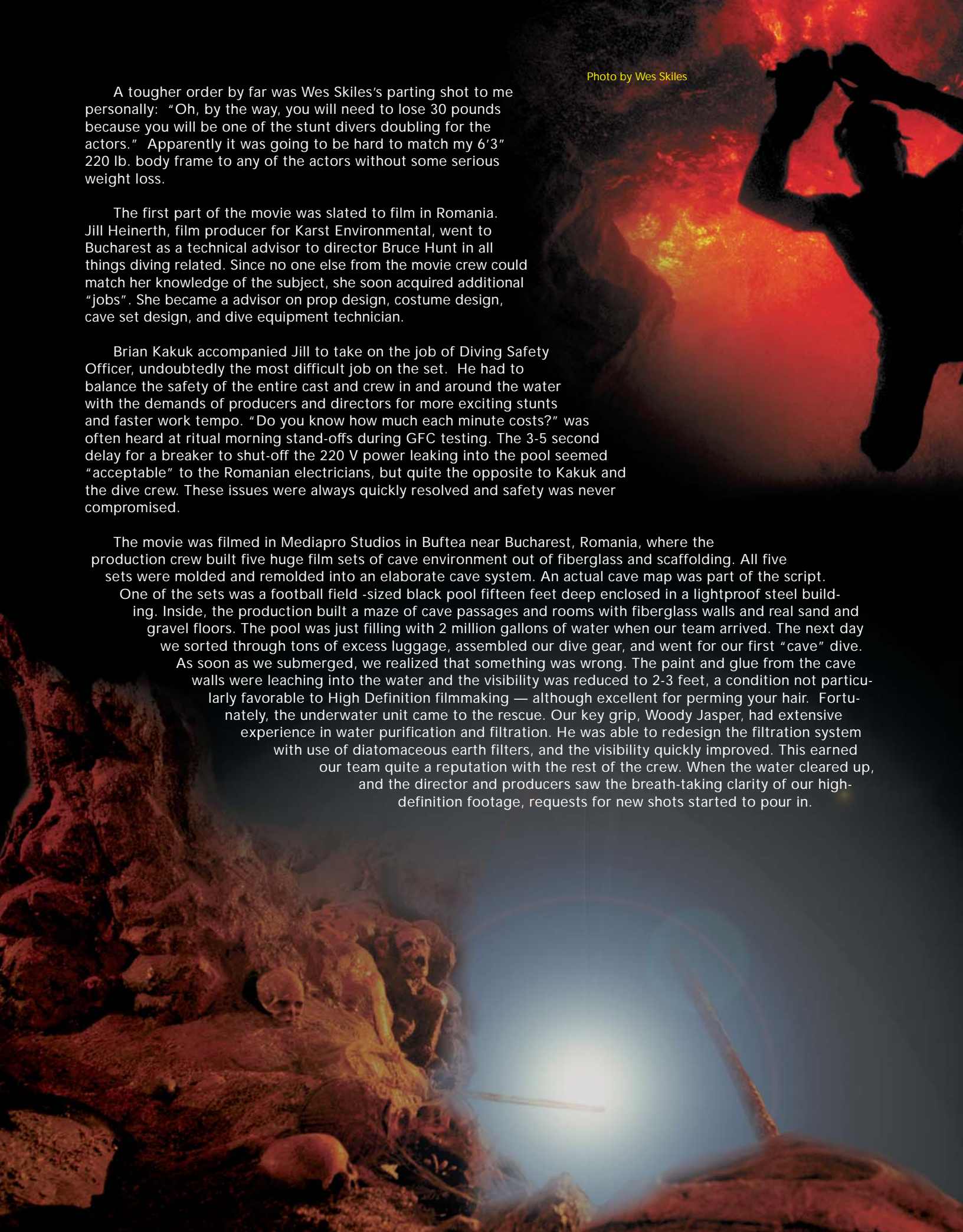
A tougher order by far was Wes Skiles's parting shot to me personally: "Oh, by the way, you will need to lose 30 pounds because you will be one of the stunt divers doubling for the actors." Apparently it was going to be hard to match my 6'3" 220 lb. body frame to any of the actors without some serious weight loss.

The first part of the movie was slated to film in Romania. Jill Heinerth, film producer for Karst Environmental, went to Bucharest as a technical advisor to director Bruce Hunt in all things diving related. Since no one else from the movie crew could match her knowledge of the subject, she soon acquired additional "jobs". She became a advisor on prop design, costume design, cave set design, and dive equipment technician.

Brian Kakuk accompanied Jill to take on the job of Diving Safety Officer, undoubtedly the most difficult job on the set. He had to balance the safety of the entire cast and crew in and around the water with the demands of producers and directors for more exciting stunts and faster work tempo. "Do you know how much each minute costs?" was often heard at ritual morning stand-offs during GFC testing. The 3-5 second delay for a breaker to shut-off the 220 V power leaking into the pool seemed "acceptable" to the Romanian electricians, but quite the opposite to Kakuk and the dive crew. These issues were always quickly resolved and safety was never compromised.

The movie was filmed in Mediapro Studios in Buftea near Bucharest, Romania, where the production crew built five huge film sets of cave environment out of fiberglass and scaffolding. All five sets were molded and remolded into an elaborate cave system. An actual cave map was part of the script.

One of the sets was a football field -sized black pool fifteen feet deep enclosed in a lightproof steel building. Inside, the production built a maze of cave passages and rooms with fiberglass walls and real sand and gravel floors. The pool was just filling with 2 million gallons of water when our team arrived. The next day we sorted through tons of excess luggage, assembled our dive gear, and went for our first "cave" dive. As soon as we submerged, we realized that something was wrong. The paint and glue from the cave walls were leaching into the water and the visibility was reduced to 2-3 feet, a condition not particularly favorable to High Definition filmmaking — although excellent for perming your hair. Fortunately, the underwater unit came to the rescue. Our key grip, Woody Jasper, had extensive experience in water purification and filtration. He was able to redesign the filtration system with use of diatomaceous earth filters, and the visibility quickly improved. This earned our team quite a reputation with the rest of the crew. When the water cleared up, and the director and producers saw the breath-taking clarity of our high-definition footage, requests for new shots started to pour in.



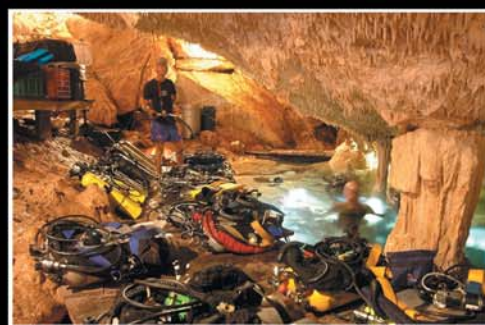
With visibility improved, and our team complemented by a group of Romanian gaffers and support divers, we were ready to start filming. Hollywood's idea of technical diving, especially cave diving, is a little different from our accepted practices. As stunt divers, we had to endure all sorts of configuration transgressions in the name of the silver screen:

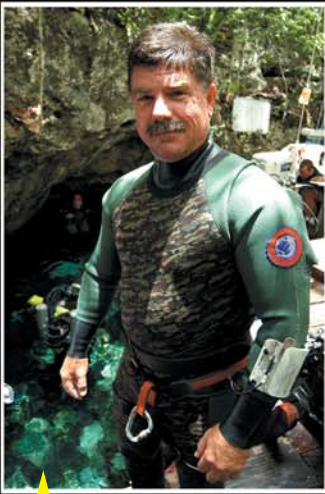
Have you ever tried to frog-kick in a pair of bright yellow split-fins and aquarium-sized mask, while pulling a fully loaded underwater "sled" through narrow winding cave passages, while simultaneously being bombarded by an avalanche of boulders and sand? Air cannon explosions smash you into the walls as underwater "volcanoes" erupt in the background. Copious amounts of "movie blood" flow from assorted "wounds" glued to your body, and various cave-dwelling creatures surprise you behind every corner, while tank and scooter explosions add flair to the scene. That is cave diving a la Hollywood.

The most exciting parts of filming in Romania were the stunt sequences. We were jumping into the waterfalls, being blasted by water cannons, tumbled along the cave passages, and dragged along the pool bottom with feet tied to the length of rope, manned topside by a bunch of gleeful Romanian support divers. Often we were breath-hold swimming through cave passages from one regulator to another without a mask or fins. Our reliable safety divers, Brian Kakuk and Andreas "Matt" Matthes, always made sure that we reached the next air source in time. The most spectacular stunt involved a diver – Joel Tower, stunt diver extraordinaire – having to dive against the flow of bubbling propane while holding his breath. He had to submerge before the propane ignited and exploded on the water surface, but late enough to make it look like a close call. While breath-holding, his only safe way was down to the regulator of a waiting safety diver, since the water surface was a raging inferno of burning propane.

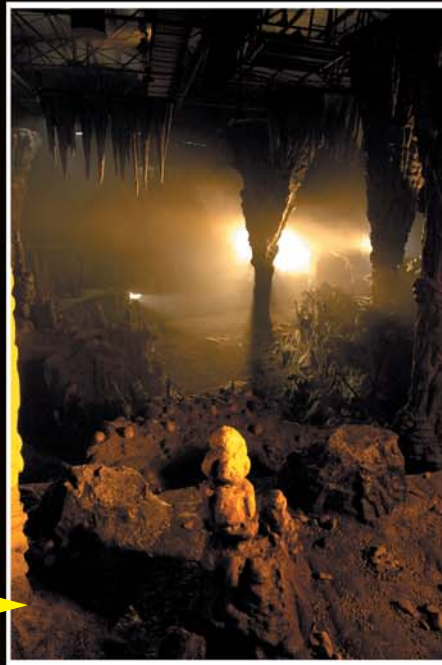
Some of the stunt divers, namely Jitka Hyniova, Jill Heinerth, and Joel Tower, doubled for several actors. That often resulted in a frantic exchange of costumes, rebreathers, wigs and assorted props. Some of us spent an hour or more a day in the hands of make-up artists who tried to make us look older or younger, darker, hairier, or just plain bloody and decrepit. Each of us had several sets of gear in different stages of disrepair, and our wet suits were in shreds with broken bones sticking out. Did I mention that this was a horror movie?

Wes Skiles and Karst Productions are known for their stunning underwater imagery in the High-Definition digital format. While the topside portion of the movie was shot on film with traditional cameras, the underwater footage was shot exclusively in HD (HDCAM SR format) on a Sony CineAlta™ HDW-950 and Fujinon lenses in Amphibico housing. The camera was connected via hundreds of feet of fiber optic cable to the surface engineering and recording setup manned by none other than Señor Nick "Bangs" Theodorakis. This setup provided Wes and Jill with unique opportunity to view the footage in real time on a 36" LCD monitor, and to make immediate corrections on the fly. Watching Nick "tweak" knobs and dials on his engineering deck was like watching a performance of a piano virtuoso. His hands were effortlessly flying over





Stunt Diver Brian Kakuk in costume.



Main set during filming.



Movie set 5.

the controls while his iPod blared the latest techno grooves. The fact that we could swap tapes without taking the camera out of the water improved our productivity tremendously; but it also made for quite long days: two four-hour-in-water shifts were the rule rather than the exception. The tanks and scrubbers were swapped at the edge of the pool, and sandwiches and coffee were served in the water. Wes's battle cry "Dive, Dive, Dive!!!" could be heard above and below water surface thanks to the communication systems tirelessly maintained by our second cameraman and technical guru, Anthony Lenzo. The full-face masks that were worn by cameramen facilitated communication with both the surface and the divers. All divers had earpieces, so they could hear and respond to directions.

The ingenuity of our grips, Woody Jasper and Tom Morris, had earned our team a place on the official "call" sheet, where Woody's SFX department listed a daily set of requirements for underwater special effects that were too specialized for the regular special effects department. Is that clear to everyone? We were constructing underwater volcanoes, fiber cable splicing/fusion boxes, building rock avalanches, designing scooter explosions, and setting up a safe sandbox for filming the actors under water. Every day brought new challenges and new opportunities for creativity. The scrap heaps around the set were a constant source of materials for our resourceful special effects crew.

After six weeks of filming in Romania, the underwater film unit packed all their gear into several hundred boxes and shipped everything to Yucatan, Mexico. Two weeks later we were all assembled in beautiful villas in Akumal, Quintana Roo. Here we were joined by a group of local cave divers, many with experience from previous underwater movie-making endeavors. We spent four weeks in a cave system called Dos Ojos filming the "beauty shots" for the first part of the movie. The

scenes we shot had stunt divers scootering through beautifully decorated halls of the cave system, as well as crawling through silted out passages. "Act panicked, act panicked!" blared Wes' voice through the earpiece. Swimming through silt-out with voices in your head, only able to feel the leg of the diver in front of you ... then suddenly there was a camera lens right in your face. Scary situation!

The most challenging aspect of filming in these beautiful locations was the logistics of moving hundreds of feet of electrical cables through the decorated halls without causing any damage. We often had up to ten "cable wranglers" suspended in mid water with coils of fiber optic cable in their hands waiting to unspool as Wes was riding with his hundred-pound HD camera on the back of a stunt diver on a scooter. It was an underwater ballet. This was all happening under the watchful eye of the safety divers who made sure that the fragile cave decorations were safe.

The local descendants of Mayans were indispensable in setting up and maintaining our jungle camps. Electricity, running water, and generators were set up around a small hole in the ground in the middle of the Yucatan jungle. Charging stations had to be built, wardrobe tents set up, and an air-conditioned "field studio" for director Gary Phillips and engineer Nick "Bangs" was erected in no time thanks to the efforts of the entire crew.





Stunt diver Jakub Rehacek.
Photo: Jitka Hyniova



Stunt diver Jitka Hyniova in costume. Photo: Andreas Matthes



U/W Photography Unit / Romania and Q. Roo, Mx

U/W Unit Director of Photography	Wes Skiles*
U/W Unit Supervisor	Jill Heinerth*
U/W Assistant Director	Jitka Hyniova*
HD Digital Imaging Engineer	Nick Theodorakis
U/W Operator/AC/ Communications	Anthony Lenzo
U/W 2nd AD	Mark Meadows
U/W Diving Doubles & Grip/Lighting	Jill Heinerth*
	Jitka Hyniova*
	Brian Kakuk*
	Anthony Lenzo
	Andreas Matthes*
	Mark Meadows
	Jakub Rehacek, Ph. D*
	Joel Tower
U/W Gaffer	Ted Overton
U/W Key Grip, Special Effects	Woody Jasper
Dive Safety Officer/2nd AC	
Romania U/W Unit	Brian Kakuk*
Topside Gaffer	Tavi
Topside Grip	Duro
Lead Utility Diver	Atilla Szallos
Support Divers	Marius Beju
	Adi
	Alex
	Manu
U/W Props	Sorbon Boncea
Dive Coordinator Romania	Bogdan Gheorghiu
Quintana Roo, Mexico U/W Unit	
U/W Production Manager	Doug Dresser
Unit Manager	Ross Ambrose
Dive Site Ops Manager, Safety	Lenny Bucoko*
Asst. Digital Imaging Engineer	Nick Bangs
2nd AC	Mark Long
Best Boy Grip	Tom Morris
U/W Grip and Lighting	Kenneth Broad
	Nate Skiles
	Chuck Stevens
Safety Officer	Steve Bogarts*
Utility & Safety Divers	Paul C. Heinerth*
	Bil Phillips
	Chris Stanton
Utility Diver	Imanol Zubizarreta
Lighting & Battery Technician	Scott Braunsroth
Topside Gaffer	Candelario Perez
Grip & Electric Crew Chief/Translator	Simon L. Manses
Wardrobe & Props Mexico	Heather Moore
Topside Equip Tech / Best Boy	Manual Guavara
Electrician	Efrain Flores
Generator Operator	Oscar Velazquez
Dive Operations Support	Martin Argerich
	Scott Camahan*
Cozumel Unit Manager	Marco Polo
Production Accountant	Steve Taylor
Catering/ Support	Shannon Caraccia
	Martina Jeising
	El Ranchito Castro
Team Caretakers	Denise Taylor
Production Office Coordinator	Elisheba Solis
Production Assistant	Enrique Estrada
Transport/ Swing Captain	Derek Raser
Drivers	Angel Escobedo
	Miguelito
Site Security	Gabriel Ruiz
	Emmanuel Chan Tun
	Zacarías Balam
	Jose E. Guitierrez

U/W scenes filmed on location at
Hidden World's Cenote Park, Q. Roo, Mexico
Rebreathers Provided by
Innerspace Systems
Leon Scamahorn*

Dive and Sport Equipment
Provided by
Body Glove
Oakley
North Face
Dive Rite
Bare

* Advanced Diver Magazine staff or contributor

The ultimate compliment to the work of our team came from the producer Andrew Mason in a form of an e-mail:
"When we look through the script we realize how vital the underwater action is to both the storytelling and the building of the fear factor, and your work has been spectacularly successful in both areas. I once worried that we might create greater interest in cave diving and send too many amateurs out into your world, but now that we have the footage (and of course the rest of the film built around it) I'm pretty sure that by the time we've finished with an audience there will be no-one who ever wants to go anywhere NEAR a cave, let alone in the water!!"

When producers saw the real cave footage, they requested many more new "beauty" scenes, and our shot-list almost doubled. Eventually, however, our time had run out, and we left Yucatan at the end of August.

The divers spent a total of 2,507 hours underwater. 30 divers were submerged for 1,702 hours in Romania, and 24 divers were under water for 805 hours in Yucatan. All dives were completed without an incident, and the eleven Megalodon rebreathers performed flawlessly in chlorine and epoxy rich waters in Romania as well as in harsh jungle conditions in Mexico.

That's cave diving Hollywood style.

The filming is completed, and the editing floor is collecting the fruits of our work. The movie should be released on August 19th, 2005 in US theaters.

See you
at the movies.

EXPLORE
You may unearth more than you're seeking!



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