DREDGING UNDER THE RICE PADDIES
IN THE PHILIPPINES
By Dave McCracken

"These gold prospectors were sending pay-dirt
to the surface from 30+ feet deep in liquid muck!"

This was somewhat of an informal expedition into several areas of the Philippines to see if we could find any promising commercial
dredging opportunities there. A longtime close friend of mine and fellow gold dredger, John Koczan, had been spending a lot of time in
the Philippines with his job, so he knew his way around pretty well. John and his wife Madel made the necessary arrangements to
move us around the country for a few weeks.
I personally spent quite a lot of time in the Philippines when I was in the navy. So I already knew the country to be very friendly towards Americans. Most of the people in the Philippines speak some amount of English. The country is rich in natural resources. The infrastructure is quite good; especially the roads and communication systems. Supplies and services there are readily available at relative low cost. And the mining laws seem to encourage mining exploration by American companies.

Logistical Planning

Since I had other business in Asia to take care of first, John, Madel and I agreed to meet in Manila, which is the Philippine Capital. Manila is a busy place. The entire modern infrastructure that we are used to in the West is present there, although traffic can be a problem if you are not careful with your timing.

"Jeepneys are one of the primary modes of public transportation in the Philippines."

Public transportation in the Philippines is very effective. Regularly-scheduled buses are destined to just about everywhere. Jeepneys and trikes are the primary mode of moving people around the townships and cities. Jeepneys are like vans with a jeep-like look to them. You see them in all sorts of shapes, sizes and colors. Up to a dozen or more people can ride in the back. A standard fee of about 10 cents (6 Pesos) is charged for a ride in almost any single direction. Trikes are basically a side-cart motorcycle. There are zillions of them. For about a Dollar (50 Pesos), you can hire a trike to take you one way to nearly anywhere in town.

Angeles City is about an hour drive to the north of Manila. It is the home of Clark Air Base, which was once America’s largest military base. The base (huge) has since been turned back over to the Philippines. They have converted it into a free economic zone. One of Asia’s largest malls is presently being put up there. The Angeles City area is where John had been doing quite a bit of business. So this seemed like a good place to launch our own expeditions to elsewhere in the Philippines.

John and I began by researching all the information we could gather about the proven gold bearing locations in the Philippines. Our research indicated that the best gold potential is in Mindanao, one of the most southern islands of the Philippines. The problem with going there on any kind of extended commercial venture is that Mindanao is the place within the Philippines where Muslim extremists maintain a stronghold. The Philippine military is down there with American assistance unsuccessfully trying to put them out of existence. Because of potential danger to outsiders, John and I ruled out Mindanao right from the beginning.
As we allowed ourselves only two weeks for this expedition, we decided to do a preliminary evaluation into two separate locations. The first was a gold-bearing area in the north of Luzon near the city of Baguio. This area is well known for historic gold mining activity. It took us the better part of a day to drive up there from Angeles City on a very good highway. Baguio is a very nice place, way up in the mountains. With pine trees and cool air, it kind of reminded me of the mountains in California.

"We were very encouraged when we first saw this clear-running river with so much bedrock exposed along the banks!"

One of our first stops in Baguio was at the Department of Mining & Geology. We were looking for information and maps concerning the historical gold mining areas. Our hope was to find a sizable gold bearing river where local technology has not allowed deeper river high-grade gold deposits to be mined by previous activity. To our surprise, the Mining & Geology officials there welcomed us in with open arms, provided us with all of the available information that we desired and offered to escort us out to a gold-bearing river which they believed was most likely to provide the type of mining opportunities that we were looking for.

Interestingly, none of the mining officials we spoke with in the Philippines had any idea what a suction dredge is or how it works. We did our best to explain it. But our final realization was that it is vital to bring along several DVD’s of my basic dredging video on these types of expeditions.

We devoted the next full day to an expedition to a sizable river located in the mountains some distance to the east of Baguio City. The following video sequences were captured soon after we saw the river from a heightened position in the mountains:

We soon met up with several local miners (women) who were panning and sluicing along the river. They were kind enough to show us the gold that they were recovering. Their gold consisted of just a little bit of fine colors in every pan; not much different than what we would expect to recover along New 49’er properties along the Klamath River near Happy Camp in Northern California.
Local village miners were panning and sluicing small amounts of gold from the river.

John and I took a few pan-samples of streambed material and also turned up some color. The big question in our minds was how rich the high-grade pay-streaks were going to be at the bottom of the river. The main problem, though, was that the average depth of streambed material looked like it was going to be more than we could manage with suction dredges. While there was some bedrock visible along the sides of the river, it was mostly slanting into the river at a steep angle, and most of the streambed deposits appeared to be very deep.

The challenge in prospecting for high-grade gold deposits with a suction dredge is to find them in shallow enough streambed material that you can gain access to the gold without being overwhelmed by too much material to move out of the way. This area generally looked to have too much streambed material along the river-bottom for us to gain access to pay-streaks in most areas. So, John and I quickly ruled out the likelihood of a commercial opportunity for our type of mining.

The officials with us told us that they did not know of any other (larger-sized) river in the area that would fit our needs. Later that afternoon in Baguio, the mining officials suggested that we go have a look at the gold potential in Legaspi. This is a gold-bearing area located on the island of Bicol further to the south. The Mining Director in Baguio made a phone call on our behalf to his counterpart in Bicol. Sure enough, there was some active “dredging” going on down there, and we were invited to have a look. This sure felt like a lucky break!

Rather than drive all the way down to Bicol, John, Madel and I decided to fly down there from Manila and hire local transportation to get us around. In the parking lot of the airport upon our arrival in Bicol, John was able to negotiate a reasonable rate for a van and driver to accompany us for several days.

One of our first stops in Bicol was at the Department of Mining & Geology to meet with the Director there. He was expecting us. In short order, he assigned one of his people to assist us with whatever we needed. That person supplied us with maps and information, and some instructions to our driver where to take us. While the official was willing to accompany us to Legaspi, he suggested that our reconnaissance might be more productive without him, since the type of “dredging” we were going to see was against the law. Apparently, because it is so dangerous, laws have been passed to prevent people from pursuing the particular kind of mining that we were going to see. The official suggested that the people doing this type of illegal mining might be more open to us if mining authorities were not present. We took his advice and just went along with our driver.

Upon our arrival in Legaspi, our first stop was at the local Mayor’s office. From long experience at doing these types of reconnaissance missions, we have discovered that it is usually best to check in with the local authorities before going out in the field on a prospecting expedition. This is the respectful thing to do. As is often the case, the local Mayor was happy that we checked in with him, and he assigned one of his personal staff to accompany us on our expedition. This was good, because the staff person (who became our guide) knew right where to take us. He was also able to introduce us to local miners in such a way that they were more open to giving us information about what was going on.
In Legaspi, our guide first took us to the beach, where local miners were recovering small amounts of gold from the beach sands using sluicing devices which were built on stilts to position them above the small waves washing up on the beach. Here follows a video segment that I captured which demonstrates the beach mining activity:

While the beach miners were recovering some gold there, John and I could not envision any kind of commercial dredging opportunity, so we moved on.

Next, our guide took us to a river estuary-area where apparently some bucket line dredges had operated during the past. We could see some of the tailings that were left behind. There, we found several active family mining operations that were recovering gold from river-bottom gravels using more sluices standing on stilts. Here follows a video segment that I captured while we spent some time with one family of river miners:

Again, while there was some gold being recovered from the river, without doing some preliminary dredge sampling of our own, we could not identify any commercial opportunity for ourselves.

Our main interest in Legaspi was to have a look at the ongoing dredging program that we had been hearing about. We kept reminding our guide about this, but he believed that type of mining would not fit into the type of opportunity we were looking for. Still, we wanted to see what it was all about, so our guide finally agreed to take us there. That involved a considerable ride in the van over some pretty rough roads.
"As we got closer, I could see that there was some kind of mining operation going on from beneath the submerged rice paddy!"
Miner pulls canvas bag to surface from about thirty feet deep, where a diver filled the bag with ore."

When we finally arrived at the “dredging” site, all I could see was a very large rice paddy. There was no river or other open water to be seen anywhere! As our guide led us on a trail across the rice paddy, I could see that there was some kind of digging activity going on at the far end. When we got closer, I recognized that it was an active mining operation!

These miners were recovering gold from bottom gravels that were located about 10 meters beneath the surface of the rice paddies! Because the paddy was flooded for an ongoing growing season, it meant that the miners were excavating a tunnel straight down through 30+ feet of mucky water, and then drifting (tunneling) along the bedrock at the bottom to fill canvas bags with pay-dirt. The canvas bags were then raised to the surface by others using a rope, where the material was broken up (a lot of clay in the material) and directed through a sluice box to recover the gold.

Each rice paddy diver received his air for breathing underwater through an airline that was connected to a makeshift air compressor which was taken from an automotive air conditioner, powered by a small Honda motor. No hookah regulator was being used by the diver. Hookah regulators do not work very well when you try to use them in muck! I know, because I have attempted it! These rice paddy divers were getting their air down 30+feet in the muck by just placing the end of the airline in their mouth and holding onto it with their teeth! Holy Mackerel!

Here follows a video segment that I captured which demonstrates the mining activity these rice paddy divers were doing. Please take note how far the man at the surface pulls up the rope to finally bring the canvas bag of ore to the surface. That’s how deep underground the diver was actively filling canvas bags! Is that amazing, or what?

While these rice paddy miners were recovering enough gold to help support their villages, John and I still could not see any reasonable way that we could implement suction dredge technology to their situation that would create an improved commercial opportunity.

I have to say that these were perhaps the most qualified underwater prospectors I have ever met to work on a commercial dredging program if and when we ever put one together in the Philippines or any other nearby country. Anyone who is able to mine gold with nothing more than an airline stuck in his teeth, while extracting pay-dirt from submerged shafts 30+ feet under liquid muck, is certainly alright with me! Imagine how well guys like this could perform on a suction dredge in clear, shallow water?
On our way out, our guide brought us by another active mining operation where hard-rock ore was being brought to the surface by rope from an underground hand-mining program. The ore was being loaded into wooden sleds, and then dragged to water by a water buffalo. There, the ore was being crushed by hand methods and panned down to extract the gold. And while they were recovering goodly amounts of gold for their effort, John and I still could not identify any commercial opportunity for the type of mining that we do.

"John & Madel"

All in all, our expeditions were productive in that we discovered that the people of the Philippines are very friendly, hard-working, and definitely have their doors open to allow modern exploration companies to look for commercial opportunities there. It just turned out that the two preliminary places we decided to go were not right for the type of mining that we do. So John and I are actively considering other areas…

Ref.: http://www.goldgold.com/stories/ricepaddiesPI.htm