



# Gem Buying in Madagascar

Going to the source for rough and cut stones

BY LISA ELSER  
PHOTOS BY TOM SCHLEGEL

We'd be traveling with Jim, Roger, gem carver Naomi Sarna and three people from Devon Fine Jewelry in New Jersey.

We landed late in Ivato Airport after nearly 30 hours of travel time. Naomi had arrived a week early to sightsee, but Roger and the Devon folks were all on our plane, so we got acquainted in the visa line. After sorting out the visas, we all waited by a little van to head into the capital, Antanarivo, also called Tana. The stars were blinding and there were nightjars flying nearby. It was Madagascar National Day, and as we drove into town the fete was in full swing. People were partying, singing and lighting firecrackers all along the road. Our hotel was right on the plaza in the heart of the party, but we collapsed into sleep.

Everyone made it to breakfast despite the jet lag, and we all headed out for a walk to see the fete and a bit of the town. Tana is a beautiful city ringed by hills, and the National Day fete was loud, fun and smelled delicious.

Jim had arranged for gem dealers to come to us — a fantastic situation. At 2pm, dealers started to set out their goods on the second floor terrace at the hotel and our shopping began. There was surprisingly little rough, but some good cut stones — some good enough to sell, others ideal for recuts. Prices started at insane, and while some never made it down to reasonable, we all found things worth buying.

One complication of shopping in Madagascar is the currency. The ariary was trading at about 1600 to the dollar.

Outside a party during the Tucson gem shows one year, Roger Dery of Spectral Gems said he was planning a gem buying trip to Madagascar ("Mada" for short), organized by his friend Jim Feibig, who runs Gemstone Adventures. My husband Tom and I are serious birdwatchers, and he's a wildlife photographer, so Mada had always been high on our travel wish list, and combining wildlife with gems was just too good to resist...



# Gem Buying in Madagascar



**TOP** Typical farm houses amid the rice fields. Many towns have electricity but this one did not.

**ABOVE** Naomi, Roger and Lisa with a dealer. A much better way to view rough than going table to table.

**RIGHT** Roger and Lisa and Alain with the miners at the river. I have a topaz in my hand.



100K AR was equal to about \$63 — and the largest banknote is a 10K, equivalent to about 6.30 USD. Small transactions involved stacks of cash. Jim had made it easy for us by allowing us to wire money to Madagascar in advance, and his staff handled the banking and conversions.

The next morning, we toured the Gemological Centre (IGM) in Tana. They have courses ranging from one week field gemology to the full FGA program, and have outstanding equipment and facilities, as well as a full service gem lab. Tom and I were impressed with the lapidary program: Madagascar is trying to upgrade the quality of local faceting and it shows in the goods we saw.

Then we had lunch and headed back to the hotel for day two of buying. Jim roused the dealers with no new goods, and as we dismissed dealers, their tables would be filled by others. Although I had my full gemological kit with me, it was too difficult to coordinate, and after a while I stopped doing much testing. At the very end of the session, exhausted, I bought two large aquamarine stones only to find out they were glass when I tested them later. The next day, Jim had already gotten the dealer on the phone, and within a few days I had the money back and the promise of an apology and the real stuff when we got back to Tana.

We saw some rough on day two, but little of interest. There was a huge parcel of bubblegum pink morganite which our carver wanted, but it was far too included to facet. The price was \$400 a gram and they were not budging. We also saw rhodolite in good sizes, sphene and some beautiful tourmaline and yellow sapphires.

The consensus among the three cutters was that we'd made a tactical error in letting the dealers take tables. It meant we were walking from dealer to dealer, and it was harder to sit with our visors and tools. For the jewelers it was fine, but for the cutters and carvers it was much more difficult. At one point, some of the rough dealers were in a hotel room off the terrace, and both Naomi and I felt uncomfortable and a bit under siege. We decided that next time we'd control the field better.

## DISTANT MARKETS AND MINES

The next day we headed out for Antsirabe. The countryside is quite lovely, and looks much like Europe must have in the Middle Ages.

The gem market there was interesting, with some surprisingly good cutting material. As always, a caveat emptor attitude was in order. Some "aqua" became topaz as soon as our toolkits came out. Tom

was looking for ocean jasper, and was disappointed to find no rough material. We got a few things, but the highlight was a hike to a tourmaline mine. Roger, Tom, Jim, and I made it all the way there (and back, fortunately) in about three hours.

Then, it was on to Ilakaka with stops at a lemur preserve and some local crafts centers. We ended our day at Isalo National Park.

Ilakaka is a hoot. It's like the Wild West come to life. We had arrived in the midst of an embargo on gem export and most miners had stopped digging. They live week by week on their efforts, so when they can't sell quickly, they go back to farming or other work. Ilakkaka was very, very quiet compared to what we'd expected. Jean Noel, the owner of the Swiss Bank mines, hosted us in his home for the day and acted as our patron. Dealers and miners were lined up outside his house waiting to show us stones.

To our complete amazement, we were offered outstanding rough sapphire right away — the embargo had also driven away most buyers, so there were stones available that would normally have been sent to Thailand or Sri Lanka. The three rough buyers took turns on first dibs, and we all got good material at good prices.

It was fun to watch the dynamics. Anyone who had successfully sold to us would reappear — they'd be given goods by others (Hey, they already sold to us! We trust them!), and would be taking a cut if we bought. People would hear a price and leave, only to return after conferring with the stones' owner and to present a counter offer. Some people walked in with two or three small stones, others with several parcels. Some of the prices asked were astonishing. One man probably thought his stone was sapphire when it was tourmaline. Others calculated in Madagascar's old currency — so we were often confused on the real price. After a happy morning of buying, we all left for lunch and a tour of Jean Noel's mine. The mine has drawn a large group of workers, and Jean Noel takes care of the families who work for him.

## What we found

Madagascar has an incredible range of gems. We saw plentiful and high quality:

- Apatite in blue and green
- Amethyst
- Aquamarine
- Citrine
- Garnets
- Girasol (sunflower quartz)
- Green beryl
- Morganite
- Smoky quartz
- Strawberry quartz
- Sapphire
- Sphene
- Spinel
- Topaz
- Tourmaline

MORE ABOUT CUTTING ROUGH



BBC Trillion in Spessartine

page 76



## Tips for traveling happy and safe

Buying gems anywhere has risks, and Madagascar is no exception. Here are several tips to help you minimize problems.

» **Keep your hands on your bag** (including belly bags) and do not give money or other items to beggars. Tana has child beggars and child pickpockets.

» **Coordinate with your hotel for security** while buying. On our trip, no one was sent to the terrace where we were buying unless they left ID at the desk.

» **Set the ground rules.** Do not let one dealer show individual stones and take up all your time. Being polite but firm, ask to see all the goods on the table at once. Proving that you won't look at rubbish will get you to the good stones faster.

» **Come prepared.** You and only you are responsible to know what you are buying and what you should pay. In many cases the sellers may not know what they have, as they carry goods for others. I travel with gemological equipment and a list of what I need and would expect to pay. It helps me avoid impulse purchases.

» **Buy in town;** visit the mine for fun. As soon as a miner finds a good stone, he takes it to the nearest town. Going to a mine is interesting, but don't expect to find gems there.

» **Make use of the lab services in Tana** if you aren't a gemologist. For a major purchase, require that the dealer come back with an IGM lab certificate. It will cost you less than \$35 and can often be done the same day.

» **Hire a reputable guide and driver** if you travel outside Tana, and you should -- Madagascar is a beautiful country. You will be expected to pay the guide's fee, but the driver is included in the car rental. You should negotiate in advance for the guide fee and a daily living allowance.

And one more thing: please consider making a donation to a charity that supports health and education. Madagascar is a very poor country.

The kids were clearly well fed and happy. There is a school, dispensary and a sense of hope in finding the shovelful that will make their fortunes.

By the afternoon, a buying routine had developed where Jean Noel's son guarded the door and Jean Noel screened each seller. Our guide Alain would insist all the stones be placed in the dish.

We'd review them and buy or say "no thanks." When the same stones appeared over and over, Jean Noel got very forceful with the line about "only new stones." When synthetics showed up, he confirmed with us the situation (he's a graduate of the FGA program in Tana) and lit into the offenders so the whole line could hear. We bought some excellent rough from him as well before the day was out.

Now we were tired. I went for an 80 minute massage, Tom wandered around photographing birds, then we all regrouped for dinner.

### TOPAZ, BIRDS, AND SAPPHIRES

The stone buying was over until we returned to Tana the following week. On the way out of Ilakaka we stopped by the side of the road where some families were panning the river. Roger, Tom and I climbed down the hill to watch them work. Throughout the rural part of the trip, anytime our faces would appear children would start yelling Vazaha! or "foreigner." The rest of our group was still up on the hill looking down, and when Tom looked up at them and yelled Vazaha, the women and children in the mine family exploded laughing.

I bought a topaz to cut just for the memory and to thank them for letting us take pictures. As the buying part of the trip wound down, we did a little sightseeing for local crafts and ended our trip at the beach in Ifaty.

From here, the rest of the group would fly home, and Tom and I would continue on to the birdwatching part of the adventure. I did make a wild friend along the way, though.

After eight days of outstanding hiking and wildlife viewing, we got back to Tana about 11 a.m. By noon, the first dealers had arrived. This time, Tom and I set up a table on the terrace for ourselves and had the dealers come to us one by one. That let me keep my tools handy and I had a stable testing area with consistent light. Our first dealers had a few things of interest, including the first blue sapphires I wanted. They were small — about .8 carats each — but they were cornflower blue and looked unheated. I told them that without a certificate, it would be impossible to negotiate so they took the stones to the IGM and promised to return at 6 in the evening.



Dealers lined up, and I saw some amazingly good material. The quality of cutting was often excellent. I'd asked for aqua, and got some very good stones at fair prices. One of the dealers who wouldn't meet my price on a parcel of cut aqua on the first day of the trip was surprised when I offered him less per carat on fewer stones. I'd already found better material and didn't need to compromise.

Throughout the afternoon, Tom was my banker and bodyguard. He'd stand behind me with the little Baggies, give opinions when I was unsure about a particular stone, and count out the cash. He'd prepped stacks of cash literally six bricks thick into groupings of 100K for easier counting. It felt awfully good to know he was there, and his coordination kept me from getting confused or overwhelmed. One dealer walked away with his cash stack (about two inches high) and came back 10 minutes later claiming we were the equivalent of \$18 short on an \$800 purchase. Tom knew he'd counted and organized the stacks of money correctly, and I offered to rescind the purchase but would not hand over more cash. The dealer decided to take the deal as is, but after that we had each person count their money before getting up from the table.

Toward the end of the day the dealer who sold me the glass appeared with his team. He never mentioned the problem, but brought the best aqua I'd seen the entire trip, and after some negotiating came to a fair price. This time I tested everything before buying it — there was no more chance to correct an error.

Tom and I went back to our room. I was completely exhausted and ready to fall down. At a bit before 6, there was a knock at the door and it was the bellman with the sapphire dealer. We agreed to meet them downstairs, and I had a long, serious talk with the hotel manager about



**TOP** Miners heading into the tourmaline pit. This is as high-tech as it gets.

**ABOVE LEFT** The ring-tailed lemur has his arm around my neck. It is illegal to keep them as pets, and this one had been abandoned at a ranger station.

**ABOVE RIGHT** A random collection of pretty rocks. The seller would put his goods in the dish and it was our job to determine what they were, and what they were worth to us.

giving out our room number. They agreed to move our room and not give the new number out.

The good news was the sapphires tested out as natural, unheated stones. We came to a price, and I got the certificates and the stones.

We'd explained to everyone that we were done buying. Despite that, when we came down for breakfast there were dealers sitting in the lobby — we thanked them and said we were no longer looking at stones. A few more called through the day but the front desk told them we weren't shopping.

The embargo was still on, so we left our goodies with Jim's staff, and he brought them out when the embargo was over. This was an unbelievable experience, and the stones we purchased made it a very profitable one as well.

**LISA ELSER** is a gem cutter based in Vancouver BC. See her work at [www.custom-cutgems.com](http://www.custom-cutgems.com). Gemstone Adventures, organizer of the Madagascar trip, can be contacted through [www.gemstonetrips.com](http://www.gemstonetrips.com).



# Gem Buying in Madagascar



PHOTOS: TOM SCHLEGEL

## FACET DESIGN

# BBC Trillion

*A Madagascar spessartine from rough to cut*

CUTTING AND TEXT BY LISA ELSER

FACET DESIGN BY TOM HERBST

## SKILLS

- basic faceting
- knowledge of gem optics

**O**n a recent gem buying trip to Madagascar, I found that rough buying in the capital city of “Tana,” short for Antananarivo, was a very different experience than buying cut stones. When a rough dealer arrived where we’d been looking at cut stones out on display, he insisted that he’d only work with one buyer at a time. My husband, Tom, and I took our tools with us and went to a hotel room our guide led us to.

It was clear right from the start that they didn’t want to work with me. Very few women buy rough, and they kept looking to Tom, who shrugged and pointed them back to me. The leader brought out a bag of about two kilos of small, included blue apatite. After a quick look I told them no and asked for tourmaline, aqua, garnet, spinel or sapphire. No, he said. Either I buy the bag of apatite, or he would not show me any other stones.

At that point I got up to leave and told them that several other buyers we were with were friends and would be working together. He couldn’t pull this stunt on one of us and expect the others to buy.

It took nearly 20 minutes of eyeballing bad stones in the poor light of the room before I told the group they had nothing of interest. As I got up, a small bag of spessartine emerged from a pocket and was pushed into my hand.

This was nice stuff. One piece in particular got my attention. It was a 12.65 carat spessartine with a shape I loved and that looked to be eye clean.

I’ve learned that if the shape doesn’t speak to me, the stone will probably sit in my rough box. I love trillions and right away wanted to cut this. After a prolonged negotiation, I bought it for about a quarter of the starting price.

It was the first piece I cut when it arrived at home in Canada.

Elongated trillions, shields and kites present challenges for the cutter. It’s easy to have extinction as you move from equilateral. Faceter and designer Tom Herbst ([www.boghome.com/TomsPages/index.html](http://www.boghome.com/TomsPages/index.html)) has some excellent designs, and his BBS design was already close to the length/width ratio I needed. I modified it to elongate it slightly more and to change the angles for spessartine.

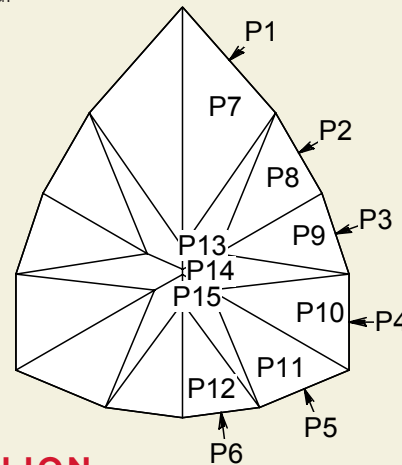
The finished stone weighs 4.1cts and is 11.49x8.48mm. It went to its new owner who had it set into a pendant for his partner.

This design was created in late 2002 and early 2003.

» BOG Optimised of ISO and Tilt

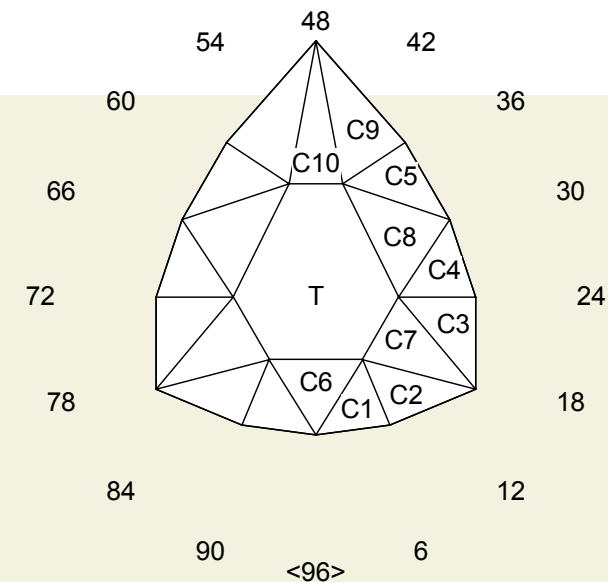
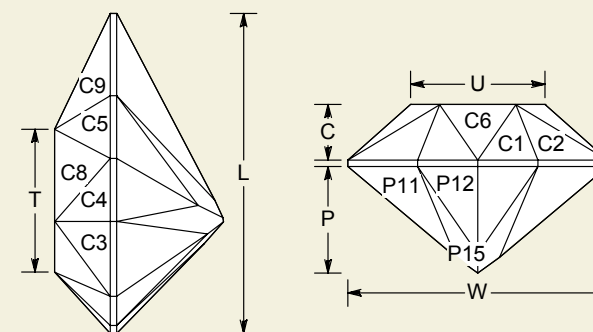
» ISO 82% in Beryl

Cut temporary center point at 28 degrees at indices 4-12-20-28-36-44-52-60-68-76-84 then cut P1-P6 at 90 degrees to establish preform. The rest is straight-forward.



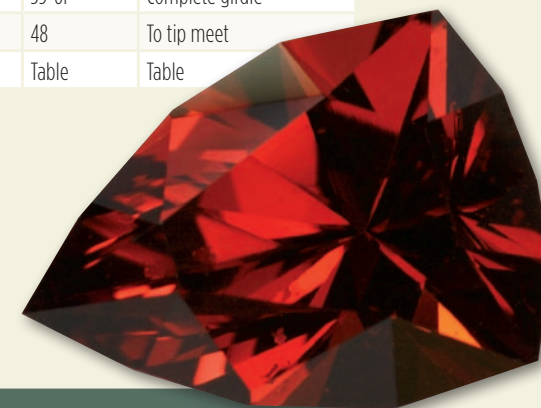
## PAVILION

FACE	ANGLE	INDEX	COMMENTS
P1	90.00°	35-61	Preform 28 deg to TCP
P2	90.00°	32-64 at 4-12-20-28-36	
P3	90.00°	29-67 44-52-60-68-76-84	
P4	90.00°	24-72	
P5	90.00°	06-90	
P6	90.00°	02-94	
P7	38.50°	35-61	To Pref TCP
P8	41.01°	32-64	To center, girdle
P9	41.57°	29-67	To center, girdle
P10	40.02°	24-72	To center, girdle
P11	42.51°	06-90	To center, girdle
P12	44.53°	02-94	To center, girdle
P13	39.68°	33-63	To girdle meet
P14	39.92°	27-69	To girdle meet
P15	42.77°	04-92	To girdle meet



## CROWN

FACE	ANGLE	INDEX	COMMENTS
C1	45.00°	02-94	Establish girdle
C2	44.00°	06-90	Level girdle
C3	41.55°	24-72	Level girdle
C4	43.11°	29-67	Level girdle
C5	42.55°	32-64	Level girdle
C6	42.30°	96	To girdle meet
C7	31.17°	16-80	To girdle meet
C8	40.58°	31-65	To girdle meet
C9	42.76°	35-61	Complete girdle
C10	25.61°	48	To tip meet
T	0.00°	Table	Table



## TECHNICAL NOTES

Angles for Refractive Index = 1,580

37 + 12 girdles = 49 facets

1-fold, mirror-image symmetry

96 index

Length/Width = 1.229

Table/Width = 0.549

U/W = 0.516

Pavilion/Width = 0.411

Crown/Width = 0.214

Volume/Width<sup>3</sup> = 0.248