They call it “deep summer,” and by mid-August, I’d say, I’m out of my depth, or at least I feel so when necessity brings me outdoors to flail about in the hot bath of monsoon season in Tucson. Much better to be coolly ensconced in my office, coolly checking out mineral sites on the web and counting the days until Denver (and, beyond it, Munich, in cool astringent Bavarian late October). The mineral pickings online these [dog] days are still a bit slim, but that makes discoveries all the more fun; let me tell you about a few I’ve been making.

**Tincalconite pseudomorph after borax, 17.6 cm, from the Baker mine, Kramer borate deposit, Boron, Kern County, California.**

*Middle Earth Minerals* specimen and photo.

**On the Web**

To begin with something unusual and sort of strangely attractive, there are some cabinet and miniature-size groups of **tincalconite pseudomorphs after borax** from the great
Kramer deposit at Boron, California, on view at the site of a dealership never before cited in these reports: *Middle Earth Minerals* (www.middleearthminerals.com). The specimens were collected in 1979 by John Seibel and Jim Minette, in the then-underground Baker mine, a locale which literally vanished into air at some later time, while the huge open pit excavation—where borate mining goes on to this day—was being enlarged. Some of the individual tincalconite pseudocrystals are incomplete or subhedral, but the clusters of sharp, blocky, almost freakishly pure white forms are quite nice to look at, indeed maybe even nicer than the original borax crystals when, just out of the ground, they were transparent, colorless, and not yet altered by partial loss of their water of hydration. Yes, I have known specimens of this material to crack and crumble to white powder, but if the Middle Earth specimens have remained intact for 32 years now they ought to be good, if carefully handled, for more years or decades still.

![Magnesioaxinite, 1.9 cm, from Merelani, Arusha Region, Tanzania. Marin Minerals specimen and photo.](image)

Another California dealership, Mike Keim’s *Marin Mineral Company* (www.marinmineral.com), has been cited often in this space, and doubtless will be again (even after the citation you’re reading now), for Mike’s stock is varied and his site is extensive. A July 17 update offers nine excellent thumbnails (1.5 to 2.5 cm) of the beautiful, gemmy *magnesioaxinite* crystals which come sparingly from the tanzanite mines at Merelani, Tanzania: this great locality has given up what are surely the world’s best examples of this very rare species of the axinite group. Most of Mike’s loose
magnesioaxinite crystals are without associations, but a couple of them feature clinging bits of white calcite and metallic black graphite. The subtle colors range from a celestial grayish pale blue to purplish blue through grayish to pinkish brown, and all of the crystals are lustrous, sharp-edged and totally gemmy. For gem-crystal fanciers they must rank as top prizes, being very elusive (far more so than tanzanite crystals) in today’s marketplace.

Despujolsite, 1.5 cm, from the N’Chwaning III mine, Kuruman manganese field, Cape Province, South Africa. *Rocks of Africa* specimen and photo.

How about *more* small-thumbnail-size gem crystals of a very rare species? You might recall from my print report on the 2011 Tucson Show (in the May-June 2011 issue) that a single dealer, Rob Lavinsky of *The Arkenstone*, had brought in a single flat of loose, gemmy crystals of the Ca-Mn-hydroxyl sulfate *despujolsite*, found in a single pocket last year in the N’Chwaning III mine, Kuruman manganese field, Cape Province, South Africa. Now a few more crystals from that strike have found their ways to Colin and Helga Owen’s *Rocks of Africa* (another newcomer to these reports, and soon to debut as an advertiser in our magazine too). Colin and Helga specify that the despujolsite pocket was hit in October 2011, although they do not say how many crystals in all emerged; only three are on view right now on their site (www.rocksofafrica.com). The crystals are tabular, yellow-green to peridot-green, and completely gemmy; they do not exceed 2 cm, but two specimens on the site are groups of crystals set off aesthetically by partial coatings of a red-brown material (hematite?). The 1.5-cm specimen pictured here has a $500 tag, but if you want to spend somewhat less money than that for a piece of southern Africa you can browse the site’s nice selections of more-familiar items from Tsumeb, Erongo, Kaokoland, Rosh Pinah, and various places in Zambia and Zimbabwe, as well as plenty more from the Kuruman district.
Ankerite epimorph after sodalite, 3.7 cm, from Mont St.-Hilaire, Quebec. David K. Joyce Minerals specimen and photo.

The website of David K. Joyce (www.davidkjoyceminerals.com) is always worth a visit if one is a fan of Canadian minerals, and particularly if one likes to try to keep up with the multitudinous mineral products of Mont St.-Hilaire, Quebec. This time, the site has a large array of St.-Hilaire specimens, most of them marked “new.” This may just mean that the dealership has newly acquired the specimens, but it may otherwise, or also, mean that the discoveries themselves are new—you can’t assume much when it comes to Mont St.-Hilaire. Among the several odd pseudomorphs which are available, I am most taken with the sharp shapes of the **ankerite pseudomorphs after sodalite**, which are pale brown and reach almost 4 cm; actually they are hollow epimorphs, and, like many items from St.-Hilaire, have surfaces rendered glittry by sprinklings of microcrystals of something or other. The major form is the dodecahedron, but bevelings of the trapezohedron show very clearly on edges of the pseudocrystals.

Suolunite, 6.8 cm, from the Lac D’Amiante mine, Thetford Mines, Quebec. David K. Joyce Minerals specimen and photo.

David K. Joyce also offers several cabinet-size specimens of the very rare calcium silicate **suolunite**, known in collector-quality pieces only from the Lac D’Amiante mine,
Thetford Mines, Quebec (see the pertinent article in the July-August 2009 issue). Found only once, at some time between 1996 and 1999, at Lac D’Amiante, suolunite comes as botryoidal masses with individual botryoids composed of densely packed microcrystals; the masses have sparkling surfaces and are deep purplish blue to pale lilac. The Joyce specimens, originally acquired by Charles Key, are hunky, almost-pretty items of this description, the largest measuring nearly 9 cm across. I have seen only one other lot of Lac D’Amiante suolunite specimens for sale—from the Canadian dealership Tyson’s Minerals, which brought the lot to the 2002 Tucson Show.

Then there’s ever-busy Barcelonan Jordi Fabre, whose mid-August update (on www.fabreminerals.com) features some interesting new gold specimens from the Linglong gold field on the Jiaodong Peninsula, Shandong Province, China. Not exactly (yet) a standard collector’s item, Chinese gold can get pretty respectable: Jordi’s six thumbnail-size specimens are lustrous, medium-yellow, arborescent aggregates of tiny skeletal crystals and curving wires. Matrix is absent in all but one case—a 2.2-cm shard of white quartz blanketed by bright dendrites of gold. For prices (converted from Euros) of $680 to $970, these are good bargains, and would represent something charismatic and new for one’s Chinese-minerals suite.

Gold, 1.9 cm, from Linglong, Jiaodong Peninsula, Shandong Province, China. Fabre Minerals specimen and photo.
Also, in his post-Ste.-Marie-aux-Mines update of late July, Jordi has a few specimens from a new discovery of fluorite made in February of this year in the Cantera (quarry) Llamas, Duyos, Caravia, Asturias, Spain. The fluorite crystals, which reach 1.5 cm on edge, are lustrous, extremely sharp cubes with minor dodecahedral faces, colorless to pale blue-violet and totally transparent; they make thumbnail and miniature-size groups which are all fluorite as well as specimens to cabinet size showing well individualized, pellucid pale violet crystals resting on platy rock matrix. These specimens are something truly new in Spanish fluorite: probably more will appear, but will they be as pretty as those already with Jordi??
The generous website of *Khyber Mineral Company* (www.khyberminerals.com) is run with ever-increasing authoritativity by 22-year-old Ibrahim Jameel, who came for the first time as a dealer to the 2011 Tucson Show (see the “HQLP” part of my report on that show in May-June 2011). As I said in print, Ibrahim has an eye for unusual things, especially “new classics” of the recent past, for which he usually charges prices which might even (if it weren’t an oxymoron) be called “shockingly reasonable.” In a July 3 update to the site, Ibrahim offers specimens (and tells stories) from his recent trip to Madagascar, and here there are such slightly offbeat items as red-brown, gemmy zircon crystals; euxenite in typically fan-shaped crystal groups of thumbnail size; loose, sharp monazite crystals to 7 cm; ugly-but-good specimens of samarskite and of columbite-group species; some decent aquamarine beryl crystals; a feldspar pseudomorph after a beryl crystal (!); and good phenakites and danburites from the famous Anjanabonoina pegmatite. Prettiest by far, though, are the *liddicoatite* specimens from several diggings in Madagascar. Many of these pieces show fine, well-terminated, gemmy red prismatic crystals in matrix, but I will show here my favorite among the lot, a floater group of parallel “polychrome” crystals of liddicoatite, 3.4 cm, from the Ibity area.

Mimetite, 4.8 cm, from the Nakhlak mine, Anarak district, Isfahan Province, Iran. *Khyber Mineral Company* specimen and photo.

On the *Khyber Mineral Company* site there’s also an August 12 update with unusual one-of-a-kind specimens, one of which I feel I must show-and-tell about. It’s a vividly yellow-orange conglobulation (I think I just made up a word) of *mimetite*, 4.8 cm across. So (you say) it is obviously a specimen from Benny Fenn’s great 1968 find at San Pedro Corralitos, Chihuahua, Mexico. Well, no, according to Ibrahim, the specimen is from the Nakhlak mine, Anarak district, Isfahan Province, Iran. If surprising, this is also plausible, as it was the Nakhlak mine which turned out thousands of specimens of another secondary lead species, cerussite, in excellent “snowflake” aggregates, a few years ago.
An August update at *Watzl Minerals* (www.watzlminerals.com) offers five pages of gorgeous Alpine specimens (and gorgeous photos thereof), some from older collections, some newly found—and you have from me a perpetual recommendation to visit the site of these two expert *Strahlers* and up-and-coming dealers, Anton and Rudolf Watzl. All of the Alpine specimens in the update are beautiful, and while some are “standards” (pink fluorite, hematite roses, quartz gwindels both open and closed), some are quite a bit more surprising. For instance, exposures of gneiss and aplite along the little stream drainage called Val Giuv, Graubünden, Switzerland, have famously produced world-class milarite and smoky quartz gwindels, but I hadn’t known that *fluorapatite* from the little locality could get as fine as this—check out the picture here.

Before leaving Europe I will direct your attention to some good specimens of *andalusite* which are now being collected from detrital boulders encountered in woods and meadows between the towns of Canete and Chete, in the Bregaglia Valley near Chiavenna, Lombardy, Italy. I learned of this occurrence during an e-mail correspondence with an Italian collector, and now here are some examples in an August update on the site of *Webmineralshop* (www.webmineralshop.com). The specimens on the site show sharp, terminated, pinkish brown prismatic crystals of andalusite to 3 cm partially embedded in quartz—but note: Marco says that andalusite crystals to 10 cm long are being found. For a humble and common species which in most cases is not much to look at, these new Italian andalusites are quite nice.
Andalusite in quartz, 10 cm, from the Bregaglia Valley near Chiavenna, Lombardy, Italy. *Webmineralshop* specimen and photo.

The final bulletin from the web will be a long one—and so it must be, for an end-of-July update on the site of Brian and Brett Kosnar’s *Mineral Classics* (www.minclassics.com) is a virtual primer on major collector-quality minerals from Bolivia. Brian says that for more than a year now he has been setting aside Bolivian specimens (in which this dealership specializes), and the result is ten pages packed with about 300 specimens old and new. In general the photos are excellent, and the specimens come in a full range of sizes (and prices), and there are many “killers” among them, as well as representatives of some unfamiliar (for Bolivia) occurrences. The list below, although incomplete, should give some idea of the encyclopedic nature of the update, with the help of some pictures that shall be on view as we go along.

**Bournonite** from the Viboras mine, Machacamarca (Colavi) district, Potosi Department, occurs both as thin, isolated “ears” to almost 3 cm standing up from massive brown siderite, and as highly lustrous “cogwheels,” loose and on pyrite matrix, of thumbnail and miniature size. Also from Machamarca (from a find in 2009) come fine **augelite** specimens showing sharp, lustrous, translucent milky white, twinned crystals to 2 cm on drusy quartz matrix.
Bournonite, 3.1 cm, from the Viboras mine, Machacamarca (Colavi) district, Potosí Department, Bolivia. *Mineral Classics* specimen and photo.

Augelite, 2.8 cm, from the Machacamarca (Colavi) district, Potosí Department, Bolivia. *Mineral Classics* specimen and photo.
Cassiterite from the Viloco mine, Loayza Province, La Paz Department, Bolivia. *Mineral Classics* specimen and photo.

Hübnerite, 8 cm, from the Himalaya mine, Mt. Illimani, Murillo Province, La Paz Department, Bolivia. *Mineral Classics* specimen and photo.

**Cassiterite** from the Viloco mine, Loayza Province, La Paz Department, is a long-known classic, but the crystal groups shown here are chiseled-looking, brilliantly lustrous, and not as black as they appear at first glance: strong backlighting reveals a beautiful yellow-brown gemminess within. By contrast, a new Bolivian item—from a July 2009 find—is **hübnerite** from the Himalaya mine, Mt. Illimani, Murillo Province, La Paz Department. Although ferberite, the iron end-member of the wolframite group, is common in Bolivian mines (and many fine examples are here, from both the Siglo XX and Tasna mines), hübnerite is a rarity from Bolivia. The *Mineral Classics* specimens have been confirmed analytically, and some crystals indeed show red internal highlights when strongly lit, pegging them as the manganese end-member. The fans of subparallel bladed crystals of hübnerite range up to cabinet size.
Vivianite is represented in fine specimens from five different Bolivian localities: the recently discovered occurrence at the Tomokoni adit near Canutillos, Colavi (well individualized blades on red sandstone); the Huanuni mine, Huanuni, Dalence Province, Oruro Department (bright, gemmy blue-green single prismatic crystals on matrix); the Siglo XX mine, Llallagua (dullish blue crystals with brown microcrystals of childrenite and other rare phosphates); the Chicote Grande mine, Inquisivi Province, La Paz Department (one specimen only: vivianite from here is extremely rare, Brian says); and finally the Morococala mine, Santa Fe district, Dalence Province, Oruro Department. (These last-named vivianites appeared first in the early 1980s, often mislabelled “Santa Fe mine.”) Also from the Huanuni mine, good thumbnails and miniatures of ludlamite are on hand, with lustrous, smoky-green crystal sprays on pyrite/siderite matrix.
Ludlamite, 3.2 cm, from the Huanuni mine, Huanuni, Dalence Province, Oruro Department, Bolivia. *Mineral Classics* specimen and photo.

**Wire silver** is now emerging from the Porco mine, Agua de Castilla, Quijarro Province, Potosí Department—a silver mine which dates back to Spanish Conquistador times and is still busily producing ore. You might recall that in the last couple of years a few superb, thumbnail-size stephanite specimens from the Porco mine reached the market. None of these appear on the present update (though you may find them in earlier parts of the *Mineral Classics* site); but there are two specimens of Porco mine **pyrargyrite** which are nicely transparent in crimson red and (as they say) promising for the future. Meanwhile the silver specimens are loose, medium-thick, curved wires to a few centimeters long, and one specimen shows two 11-cm wires rising from a bit of gray (acanthite?) matrix.

**Andorite, zinkenite, stannite and franckeite** from the San José and Itos mines (these mines are connected underground), Oruro city, Cercado Province, Oruro Department all had dramatic market showings after a major find in November 2004, and fine specimens of all are on view in the update. I find the zinkenites most impressive; some are loose clusters of matchstick-thick crystals, others are sprays and fans resting on pyrite matrix. Nor (speaking of sulfides) can I fail to mention the wonderful 10-cm **bismuthinite** specimen from the Tasna mine, Potosí Department.
Silver, 6.8 cm, from the Porco mine, Agua de Castilla, Quijarro Province, Potosí Department, Bolivia. *Mineral Classics* specimen and photo.

Zinkenite, 5.8 cm, from the San José mine, Oruro city, Cercado Province, Oruro Department, Bolivia. *Mineral Classics* specimen and photo.

Bismuthinite, 10 cm, from the Tasna mine, Nor Chichas Province, Potosí Department, Bolivia. *Mineral Classics* specimen and photo.
Paravauxite, vauxite, and wavellite from the Siglo XX mine join the vivianites mentioned earlier: the wavellite comes as satiny pale yellow, smooth-surfaced spheres on quartz crystal groups, the paravauxite and vauxite as brightly colored (pale green and sky-blue respectively) crystal sheaves, both on and off matrix. Oh yes, and there are miniature-size specimens of monazite-(Ce) from Siglo XX, with sharp yellow-orange crystals scattered on quartz crystals, some with microcrystals of xenotime.

The massive update also offers fine specimens of stibnite from the La Salvador mine, Oruro Department (found in the early 1980s); boracite crystals to 1 cm, some pale green and others peach-colored, in gray matrix from Alto Chapare, Cochabamba; copper in great, loose fans, resembling gingko leaves, to 10 cm, from Corocoro (found early in 2011—see also the 2011 Tucson Show report); phosphophyllite and hopeite from the new occurrence in the Huayllani mine, Machacamarca; magnetite from Cerro Huañaquino, Potosi (brilliant black octahedrons scattered on matrix plates to 12 cm); siderite, some specimens showing gemmy yellow-brown crystals to 2 cm, from several localities; and, among the Bolivian oddities, scorzalite, arsenopyrite, metastibnite, sphalerite and pyromorphite. Whew.

Swiss Mineral Calender

Faithful readers of our magazine might recognize the name of Thomas Schüpbach: he is the Swiss mineral collector and expert photographer who has contributed many dazzling specimen and landscape images to the articles in my “Alpine” series over the past few years. Herr Schüpbach is planning to usher in the year 2012 with a new, dazzling-as-usual, product—a 2012 calender bilingually called “Alpine Mineralien Schweiz/Minéraux Alpins Suisses,” and we at The Mineralogical Record already have
procured our own copies, and it seems to me that any serious mineral collector with even a halfway serious eye for aesthetics might want to do the same. The calender measures 29.7 × 42 cm, and for each month there is a beautiful photograph of a Swiss mineral specimen from a public or private collection in Switzerland. Some photos are close-ups of micromount specimens while others show cabinet-size pieces whole, but regardless of size they are all dazzling indeed.

Highlights include sleek, gleaming little crystals of jordanite and sphalerite on sugary dolomite from the Lengenbach quarry (January); an amazing, transparent green, bipyramidal clinochlore crystal with a gemmy diopside crystal from Täschalp (May); a 7.5-cm cluster of limpid chloritic quartz crystals from Lukmanierschlucht (August); a thumbnail with a doubly terminated smoky quartz crystal and a pink octahedral fluorite crystal both resting lightly on matrix, from the Göscheneralp (September); and a princely hematite “rose” with adularian orthoclase from the Gotthard Pass (December). The calender costs 20 Swiss francs plus 10 more francs for shipping (within Europe; shipping to the U.S. would probably cost more). This all comes to a (frankly) fairly high total of around US$38...but what an Alpine feast for the eyes. Direct your inquiries to Thomas Schüpbach at schuepbach22@bluewin.ch.

That’s it from Tucson in doggy August. I’d be glad to visit with any readers of these reports who may choose to accost me—perhaps with helpful suggestions—in Denver or Munich.