

EINKORN TALKING – OCTOBER

Greetings from your Einkorn!

October is here. The Einkorn field, seeded but bare brown yet to the sky, has the fresh look that newly-drawn furrows convey. And then, one morning, nothing has changed as you look across the field, but when you seek out a perspective that allows you to look directly down-furrow – ah!, a shimmer of the lightest green. A shimmer, that's all it is, not a corporeal green line but an apparition, a hint of what shall rise in that furrow. This green sheen hardly even seems to touch the ground.

Since you can't see down more than a handful of furrows at one time, you walk field's edge perpendicular to the furrows' ripple, gladly letting the Einkorn convince you that, yes, it's a-coming.

Are we irrational here? Yes. After the germination test of the seed lot, and digging in the field to ascertain soil moisture, the crop's emergence was quite predictable. For all that – because nature isn't simply one-plus-one-makes-two – the gladness of the heart at the green sighting is a spring of emotion.

You step onto the field. Close-up, the shoots expose themselves in a most tender manner, stabbing skyward but yet obliquely. As though uncertain of the light, that bright-light energy beaming all around them, the tiny shoots stand irresolute, their force to grow still the seed underground that sends up nutrition and instinct.

Not much later, in a week or two, the shoots stand firm. Full-green now, they reach up as they grow in the race to feed on the autumn light, sensing the winter ahead. By the end of October they've multiplied their blades whose tips are now visible above the furrows – the field's finally greening. With the ancient grains the emergence isn't as even as with commodity wheats, so Einkorn's first greening is like that undirected tuning of instruments by orchestra musicians before they launch into the symphony, altogether now.

How often has the greening gladness affected farmers throughout history? Millions of times, that's for sure, because it's one of the emotions that defines the farmer. Hunter-gatherers, too, feel joy when nature renews itself; the difference is that with a planted crop the farmer has his hand in nature, a hand in those greening furrows. And, for a very very long time, the farmer's bond with the land was uplifted by spell and prayer.

But that developed at the end of the earliest domestication era. Before farmers. Before history. How the nomads who domesticated Einkorn and Emmer propagated those and other crops is a matter of conjecture. Isn't it fun to

speculate about how they did it?

Certainty came with history. Priests and kings, religions and kingdoms of large and larger populations. In school we all learned the summits of history, the big steps that civilization took by way of Sumer, Babylon, Egypt. Einkorn was there, and Emmer the more predominant. Into Europe!: Greece and Rome.

Ah, but wasn't there as well a direct route into Europe that the archetype grains took?

Let's travel to Romania to find out.

We'd discussed our Einkorn quest in Romania with an archeobotanist in Berlin. "Your best chance to find *Urgetreide* is in north-west Romania," he'd told us. That'd be Transylvania? "Yes, that's where I would start," he'd said. About 1900 kilometers later we're in Kalotaszentkiraly.

We arrive just before rush hour when it's stop and go, stop, a dart into the other lane when a few-seconds opening presents itself, then, again, stop. Stop and dart. You don't know what rush hour is until you experience this. Stop and dart.

Don't we have better things to write about than describing rush hour in Transilvania (local spelling)? Shouldn't we begin with the strange fact that the origin of the Romanians is a politically hot potato even in this day of DNA science? Or that the prevailing language here in Romania's Kalotaszentkiraly is Hungarian? Or that Roma (Romanies, gypsies) are building palaces four miles from here in the little city Huedin, unbalancing its street scenes with a score of 50-room mansions roofed with sheeted tin gleaming, upside-down Mercedes emblems atop the mansions' corner towers provoking a you-figure-out-what-this-means mysticism? Besides, why do some people call this village Kalotaszentkiraly when others call it Sancriau, and still others have it as Zentelk?

Look, we don't want to confuse you. It's Romania that is confusing, particularly the large part of it that's Transilvania. We're in the Balkans now. Hoary lands.

The Balkans of south-east Europe: they're like a human subduction zone since before history, forces building in the west and forces building in the east to clash and grate here, duress north and south propelling migration waves that wash over the mountains again and again, raider peoples overrunning valleys and plains. It's no coincidence that Europe's last war erupted in the Balkans, ethnic factions killing each other in the former Yugoslavia, in the 1990s.

The Balkans also are known for traditional agriculture, especially Romania.

The Romanian term for *Urgetreide* – “archetype cereal grain” – is *Alac*, also *Alacul*. We’re looking for *Alac*, *Alacul* we tell Ibolya Matyas, the interpreter we’re hiring for the next day. Actually, she’s not a trained interpreter but an English teacher in the high school of Huedin. She’s pregnant and so close to her due date that her husband, Feri Matyas and their little girl Vincze will ride along, just in case she goes into labor while we’re taking a tour of several neighboring villages. We will drive extra carefully to avoid the innumerable potholes typical of Transilvanian roads...

Matyas is stumped by *Alac*, no, she says, she’s never heard of it. Einkorn? Emmer? Spelt? She shakes her head. We also want to learn about traditional food production systems, we add. That’ll be easy, she assures us. After all, in much of rural Transilvania horse-and-wagon transportation far outranks the number of tractors and trucks. Matyas explains about the farmers: “They don’t make any money. They try to live without spending any money.” She ought to know; until her father fell ill her parents, too, were village farmers.

As we arrange a time for the tour the next day, a stir on the village streets. “Oh, the cows are coming home,” Matyas exclaims, downright pleased that we’re so lucky as to catch the sight. Fifty cows, or a hundred, two hundred? They’re hard to count because the village streets curve and branch. We see long, long strings of bovine plodding, a mid-street taurine queue conducting an imperturbably slow but persistent rush, with the occasional plop onto the pavement. We don’t have to explain the plop, do we?

The cows leave for hill pastures in the morning, and return in the evening following their milking-time clockwork as a herd, Matyas says.

We notice an old woman carrying a long, crooked stick on a side street. She’s between 70 and 90 years old, we guess. She reaches the bovine queue just in time to cut her cow out of the line. Back up the side street she ambles with her cow, the animal’s tail and the woman’s skirt swinging in slow synchronicity.

We bid Matyas good bye and negotiate the flow of cattle with stop-and-dart driving, until we arrive at our lodging: a *pensiune* in a traditional Hungarian village farmstead. Our host opens the heavy metal gate, we drive into the farm yard and park. A two-room addition had been built onto the square, street-fronting farm house some time in the past; this small, one-story addition was recently remodeled into two *agroturismo* rooms. It’s simple, nice and clean, with a private bathroom, at 40 Lei a night (about \$12).

Sitting on the porch bench as the sun goes down behind the barn, we hear the

last of the cows out on the street, their bells tinkling. Until 1989 Romania had been in the grasp of East Bloc communism; today the cow bells announce again an economy based on the private cow.

If Kalotaszentkiraly is a Hungarian village, the villages surrounding are Romanian. "There are less and less farmers," Matyas says on the way to our first stop, a functional watermill. "When I was a child, every second house in the village was a (full-time working) farm. Now it's about 25 percent of families who still farm." Around 1100 people live in Kalotaszentkiraly.

The mill is picturesque, a solid stone building cool in the sun. We're introduced to Adrian Potra who tells us through Matyas that his family has operated the mill for at least five generations. "Three years ago we renovated everything on the outside," he says of the wooden channels and gates that direct the creek water to the big wheel and, alternately, to a construction of wooden slats aligned in funnel formation. What's that?, we point. "It's to clean carpets and wool clothes," Potra says. He shows us the family's wool rugs on a line to dry. The craftsmanship is exquisite. Where do they sell these beautiful rugs? "Oh, no, no, no, they don't sell the carpets," Matyas translates. "They only make them for family treasure."

To see the millstones you step down into a square room. A large shaft connects to the milling apparatus, the heavy stones about four feet in diameter; the water power can mill over 1000 kilograms of flour in a day, Potra estimates. "People bring wheat, oats, maize to have milled. Most of the milling is for livestock rations – horses, cows, pigs, sheep, chickens." No money changes hands, for the milling they receive a portion of the flour, or some of the grist that they then feed their own livestock.

How many days a year does he mill grains? Potra looks at us blandly. We have misunderstood, he was talking about how things were in the old days. "Now it's just for tourists to see." So the "functional" means that this watermill is mechanically in working order, but it's no longer functional in a local food production sense.

"People stopped coming to have grains milled about 20 years ago."

Two villages farther on we ask directions to the local wholesale bakery. The people there, as in most places in Transylvania, are very friendly. Where does their flour come from? They buy it from a large Hungarian-Romanian company. It's a big firm, and where the grain for the flour originated they do not know, they do not ask.

They want to show us their production rooms. Huge mixing machines are filled

from 50-kilogram flour sacks, puffs of white dust rising. In the adjacent room the oven bakes 100 loaves at a time.

The business is of 15 years standing. They distribute their breads within a 25-kilometer radius. But for the flour of unknown, and probably varying, origin, this is a nicely local company.

We must take a loaf as a present, they insist. It's *Paine Alba*, 1.4 kilograms, the white bread commonly on offer in a typical *magazin* (shop) in villages. For white bread it's really good.

The two dates we heard, 20 years ago, 15 years ago, ring differently in Romania than they would in Western countries, because the Romanian experience is split into two eras – during, and after, communism, and a strange brand of communism it was under Ceausescu who by all accounts had turned himself into a nasty dictator. Towns and cities came under forced industrialization coupled with social engineering that moved large populations around, concentric to the developing heavy industries. Ceausescu's last devilish plan was to resettle villagers in "agro-industrial-centers" so as to have more control over them; as long as their village structures remained roughly in place, farmers in remote areas retained a degree of independence even after they'd been forced to do their work as collectives. Fortunately, Ceausescu was executed in the revolution of 1989, before his agro-industry plan could be implemented. As of this September the public can view the wall where Ceausescu and his wife were shot.

If local food systems managed to retain a lot of their integrity under Ceausescu, especially in remote areas, Romania's new-found capitalism started breaking down the local food connectivity rather quickly, Matyas relates. "My grandfather was very, very sad in his last years, he hated to see the local things, like flour from that watermill, disappearing."

Neither miller nor baker knew of *Alac*, so Matyas decides that we go see some horse people. "Maybe they've heard of *Alac*." Their place is at the edge of a village in the opposite direction. By a barn a horse is getting shod.

These are young folks, trying to catch the upwind of *agroturismo* as a means to live in the village. They have 20 horses for riding, and 14 foals. They say they want to make a living as outfitters. That's down the line, though: "First the people have to learn to ride the horse. Horse riding is not traditional in Romania."

So here's another unexpected aspect of a land with a most vibrant horse culture: later, after a 2000-mile criss-cross of Romania's Transylvania, Moldova, and Bucovina, we'll have passed thousands of horses on and by the roads, but they were all driving horses and not once did we see someone riding horseback.

Astonishing, isn't it, in view of the official horse population estimate of over one million.

The hopeful outfitters buy the hay for their horses from a good many local farmers, they tell us. But they don't recall that any of them ever mentioned *Alac*.

Last stop, and the main one for the day, is at the Vincze-Pal farmstead back in Kalotaszentkiraly. Miklos Vincze-Pal is unloading grain sacks from his horse wagon, so his wife Anna speaks with us.

"Wheat, yes, we grow wheat every year." Altogether they farm seven hectares (about 18 acres) together with their son who raises sheep. Five and a half hectares are in hay, a half a hectare grows potatoes, and one hectare is their wheat.

"Wheat is expensive," Anna Vincze-Pal says, taking us through their program: first they pay someone with a tractor to plow the strip, then to till it. Then they pay for chemical fertilizer, even though they apply manure from their cows, pigs and horses as well. Then they buy seed from a seed company. In spring they buy herbicide. Last, they pay a man who has a combine to cut their grain which usually amounts to 4000 kilograms off that one hectare (about 56 bushels/acre).

The chemical use surprises us, most wheat fields we'd passed are farmed without chemicals, judging by the weeds in the wheat strips. And chemicals aren't the only odd thing about the Vincze-Pals' wheat farming.

"We always harvest right after July 20."

But the dates of maturity vary from year to year, don't they? "Yes, but July 20 is our traditional date. This year we had to dry the wheat. We did that here in the farm yard. That was a lot of work, some of our in-laws helped."

Why not let the wheat ripen in the field, and cut it when its dry? "When we wait until after July 20, the wheat shatters in the field."

What variety do they plant? "We switch varieties every two years. If we grow a variety for more than two years, the yields decrease dramatically."

OK, we cannot explain the shattering, nor the yield decreases in the third year despite the fact that they rotate their wheat ground.

We follow Vincze-Pal to the barn in the back; square wooden compartments are used to store the wheat. The compartments are open on top. Stored like that, doesn't the grain draw minions of mice? "No, we have cats. Once we had cats

that even ate our chicks.”

A shed is built onto the farm house, there a big old electric gristmill turns. “This is how we mill the wheat before we feed it to the animals.”

Does she mill flour, too, to bake her own bread? Vincze-Pal shakes her head. “My mother-in-law always made bread. I tried once, when I was 25 years old, but no, baking isn’t for me.”

So, how does the farm make money?

“We make no money.”

You make no money?

“No, we make no money.”

We explain to Matyas that Vincze-Pal had just listed the various expenses that regularly occur in their wheat production, which money must come from somewhere. Did they win the lottery? Matyas explains our point to Vincze-Pal who launches into five minutes of Hungarian.

Matyas gives us the bottom line: Vincze-Pal’s “no money” is meant as “no profit,” as negative-to-a-business-plan. In other words, they do not sit down and compute all the wheat-growing expenses, and then calculate how many hogs – who eat most of the wheat – they have to sell in order to make a profit or at least break even. Instead, the wheat production gets paid for, the pigs are fed, the pigs are for the family to eat, and that’s that.

What income there is, is sporadic: “They use the gristmill to mill the grain of other people, that’s a little money,” Matyas explains. “And they sell a little of their cheese,” she says, pointing to a row of cheese-cloth-wrapped cheese balls a foot in diameter curing under the eaves. “And the husband does work for other people with the horses and wagon. And they sell some of their calves in spring.”

Somehow things work out for them from year to year. The concept of accumulating money is deliberately not part of their philosophy: “She says that they like their life the way it is,” Matyas translates. “They don’t want to live any other way.”

We’d sensed that Matyas had grown increasingly bewildered by our quest for *Alac*, the more people told us they’d never heard of it. She’d phoned the seed company in Oradea for us, where the Vincze-Pals buy their wheat seed. “They

sell both land-race and modern varieties of wheat. They're just dealers, they buy and sell; a lot of their certified seed comes from Serbia, some is grown here in Romania," Matyas' notes say. But not even the seed company salesmen had ever heard of *Alac*, nor of *Triticum monococcum*, *diccocum*, *spelta*.

Some days later, on a Friday after 10 o'clock at night, a rattle at the gate. Our host frowns, who could it be this late? It's Matyas and her daughter. Gee, we're thinking, should she be walking from the other end of the village as advanced-pregnant as she is?

Matyas is all excited. She says she searched the Internet. And she found *Alac!* *Spelta!*

Subtext: the foreigner isn't totally crazy, the mysterious stuff does exist in Romania.

We'd told her that we'd be driving to Turda to take photos of the famous farmers market there the following morning. "This is urgent," Matyas says, handing us a sheet of paper with an address. A business called Casa Bio. "It's in Cluj, not far from Turda, you can go there after you take pictures. On Saturdays the shop in Cluj is open until three."

Turda: In our search for *Alac* we'd been directed to the Stajunea de Cercetare-Dezvoltare Agricola; this research facility is on the hill above town. Two professors made time for us, the director of the facility, Ioan Has, and wheat breeder Moldovan Vasile.

The professors know of *Alac*. Although, they're not certain if the term refers exclusively to Einkorn, or if, like "Farro," it applies to all three ancient hulled wheats. They consult a much-used textbook. It's a folk name, and as such its meaning might vary by region, they concluded.

As for their expertise, commodity crops in big production are their focus. "Of maize there are 3 million hectares in Romania (7.8 million acres); the second grain crop is wheat, and then oats," Has said. "In this area (the Transilvania Depression) some hard red spring wheat is produced, but about 15 varieties of winter wheat are our main commercial wheat production," Vasile noted. "On the larger farms, winter wheat can yield as much 8000 kilograms per hectare" (110 bushels/acre).

What with farmers tending to be conservatives if not traditionalists, are they given to planting modern wheats?, we ask the breeder. "On the bigger farms it's about half-half," Vasile said. "In this area the semi-dwarf wheats do best, people can see that. The most popular wheat is out of a breeding program, but the cross was

made over 100 years ago, by now it's considered traditional."

Whereas in the higher elevation valleys almost all crops are raised in strips, the strips as narrow as 35 feet (picture an acre divided into four strips of 12 yards by 100 yards), in the more open country around Turda you see larger fields, too. Romania's entry into the European Union, was that a good thing for the country's agriculture? "That's a very, very hard question," Has said, noting that he's served on an EU commission that prepares analyses which are some of the basis for EU agricultural policies. Our question he leaves alone.

Has wants us to see their breeder seed and experimental plots, especially the *Spelta* since that's what we've come for – "the *Spelta* is a project for a PhD thesis by one of our students."

In the car on the bumpy way to the station's fields, we ask further questions. One small-farm aspect that had surprised us during our travels was the big percentage of maize. "They grow so much maize because it's easier to harvest by hand than wheat," Has explained.

He pointed out that the ratio of maize to other crops adds up to inefficiency, even on farms with machinery. "The growers have limited possibility to organize crop rotation. So the problems of fusarium and other diseases get worse," Has remarked.

The crux is that small-farm production is of no interest to large industry: "Cargill is big in Romania," Has said.

We tell the professors that we're charmed not by commodity production but by the traditional farms. On our drives looking for *Alac* we'd seen a smattering of mechanization, the machinery on small farms typically older than a half-century; in fact, in over 500 miles of side-road mountain travel at the height of wheat harvest we didn't see a single combine of so recent a vintage as to have a cab.

Small-farm wheat is traded at farmers markets, Vasile said. "And many sell from the field."

We'd witnessed such an off-field delivery in Kalotaszentkiraly; a 1950s John Deere combine harvester pulled close to the open gate of a farm yard, one wheel on the sidewalk, the combine spout hurling grain onto tarps spread at the gate; when done, the little mound of grain looked like about 20 bushels. The driver of the combine, standing up at the machine's controls, lit by the reddening sun of evening, had the aura of a Roman chariot driver – a man made proud by his uncommon conveyance.

Lack of storage is another hurdle for Transilvanian big-scale agriculture, Vasile pointed out. “Near the Black Sea there are large grain storages, the wheat stays in the silos until the price is high; but here in this area, grain storage is a problem.

“We are in a period of transition,” he elaborated. “In socialist time the agriculture was bigger, but after the so-called revolution they divide the land into small private lots, many farms of only two or three hectares, family farms, you could call them.”

We’d heard about this previously in Cluj, from a Hungarian official at the tourist office who spoke of the differences in how communism was dissolved in the two neighboring countries. “In Hungary the land was not given back to the families that had formerly owned it,” he’d explained. “Instead, vouchers were given out, and everybody could get land where they wanted, or sell the vouchers. Here in Romania, all the land went directly back to the same family who’d owned it before. So there are many, many very small farms now. The farmers couldn’t agree on who was to pay for the irrigation systems, so those fell apart after a while. Then we had a drought for three years, and there was no money to irrigate the grapes – this used to be a major wine grape area.

“Also, in Hungary foreigners cannot buy farmland. Even Hungarians cannot buy it, not without showing that they come from an agricultural background. In contrast, in Romania we now have huge farms in the south that are owned by investors from Saudi Arabia, and in the west really large farms are owned by Austrians.”

From the commodity perspective of the Turda professors, only one solution offers itself for capitalist agriculture in Transilvania: “Instead of thousands of small farms, there need to be farms of at least 50 to 100 hectares (130 to 260 acres) in size. Otherwise there won’t be mechanization,” Vasile said. “We tell farmers that they need to form associations.”

Again the Hungarian in the tourist office: “Romanian farmers don’t want to form co-ops. ‘We remember the system of collectives, we didn’t like it,’ they say.”

When we arrive at the research station’s fields, Has and Vasily give us a run-down of the different crop experiments and new-variety seed increases. And, we see our first *Alac* in Romania. It’s a nice stand of Spelt, a German variety we’re told. It’s raised dryland. “The average precipitation here is 540 millimeters, but there have been years with only 300 millimeters” (about 21 inches, 12 inches, respectively).

“Some *Spelta* is being grown in Romania, but on very small surface,” Has said. He wouldn’t know where to send us, he added: “Maybe somewhere in the

mountains,” he said, echoing the sentiment of the Berlin archeobotanist – farmers in remote areas may just have kept up an old tradition. Although, Has emphasized, it’d be a rather very old tradition at that: “*Triticum aestivum* (bread wheat) has been the standard crop of wheat in Romania for at least three centuries.”

“Check at farmers markets, you might find *Alac* there. A big farmers market happens in Turda every Saturday,” Vasile told us in parting.

Transylvania’s farmers markets blend into the history of “market town.” From outlying villages farmers arrive with their horse-drawn wagons, or with cars, or vans, a few drive a truck. Some towns, like Turda, have permanent stone tables under a large roof span central to their market space. Other towns, like Curtea de Arges, hold two markets, one in the town center for vegetable and fruit vendors near an indoor market with butcher and baker shops, the other, a public market at town’s edge, is for grains, beside some flea market space.

Grain farmers there spread tarps on the ground. Heaps of wheat, oats, maize wait for buyers in the open. Polenta milled from maize, and wheat flour is unceremoniously piled on the tarps as well. We notice that the grain is straight from the combine, on offer without a thorough cleaning, there is always a little chaff in it. Some vendors have their grain and flour for sale already sacked, sample sacks up front with their tops rolled open. We watch the wheat-buying action for awhile – most people prefer to buy from wheat piles on tarps, so they can they watch the farmer fill sacks to order, then weigh them, then tie the top with a string. Rustic’s the word. What do you think a farmer looks like after shoveling flour from a tarp into sacks for a few hours? Yep, he’s covered in white dust head to foot. It’ll be a wonder if the wife will let him ride in the van on the way back to the farm...

We observe some haggling, even though the prices on handwritten signs are the same across the market. Wheat: “0.90 Lei / kg.” That comes out to 24.50 Lei a bushel, about \$7.20. Which is better than the going commodity price the professors had quoted us, of 0.60 Lei a kilogram, about \$4.80 a bushel.

We look up. Power lines run along the road by the wheat market. Hundreds of pigeons balance on those lines, waiting for spilled grain that’ll be left on the ground when the farmers depart. Where would those pigeons have perched 200 years ago, spying on a similar market scene?

At markets where produce is traded, some wheat and polenta is also on offer, in small plastic sacks weighed out to a kilogram. The wheat grain in these little bags – “1 Lei” – has been cleaned, most likely with hand-shook sieves.

Mid-summer of course makes for colorful produce displays, tomatoes and cabbages, melons and apples, Sickle pears, berries, onions and spuds, peppers, cukes, eggplant. Dill is sold with the stalks folded into lengths about a foot long, then bundled. St Johnswort bundles are among the spices displayed. Dry peas and beans are measured out in canning jars. A forlorn individual walks around trying to sell used grain sacks, one by one. Against a building stand gypsies with three willow baskets hand-woven, next to kindling-size birch branches tied for brooms. Around the corner a small group of sellers with chickens and rabbits, among them an old woman – between 70 and 90 – with one chicken. That chicken must know her woman well, it's not in a cage like the other sellers' birds but sits calmly at the woman's feet on the street.

Every market spills out of its permanent structures, and on the outskirts you typically see folks selling amazingly small quantities, one small basket of potatoes, three pints of berries, a little pile of mushrooms, just enough for one frying pan. Beggars are endemic.

The Turda market is a bustle, just as the professor had promised. Here's what you don't see at an American farmers market: right next to the roofed market area a business conveniently offers "*ERBICIDES, PESTICIDES, FUNGICIDES.*"

Following Matyas' suggestion we drive to Cluj after our market photography. At the Casa Bio shop downtown we're in a world ever so different from the market. There is no store front, you walk through the door under the shop sign, follow the corridor, descend stairs. The four rooms with their shelves and bins, EVERYTHING *BIO!*, could be in any western country – think small American health food stores of the 1980s. Some product is sold in bulk, everything else is neatly packaged, natural-themed, the health claims, cooking recipes and recommended portion sizes in small print on back labels, mostly in German.

Alac? "No. Never heard of it." *Triticum spelta?* "We have *Spelta*, it's over there." *Spelta* berries, *Spelta* flour, *Spelta* rolled flakes, *Spelta* bread, and an assortment of *Spelta* Tagliatelle pasta.

"Sure, Romanians know *Spelta*," the sales girl insists. Really? "Oh yes. I eat it all the time. It's just like wheat." Why buy the expensive Spelt if it's just like the cheaper wheat? "Oh, it tastes much better," she says.

The label on the *Spelta* pasta packages proclaims that Dr. Vuza recommends the product for health reasons. Who's Dr. Vuza?, we ask. "She's one of the owners of the store."

Most of their health food items are purchased elsewhere in Europe, German bio

products the majority, the young lady says. But the Spelt is Romanian in origin, sourced from a company in Deva. That's a Transilvanian city southwest of Cluj. We also find out that there is a BioFarmland company near Arad, further west. We jot down that information.

We fill a shopping bag with *Spelta* products. Back in Kalotaszentkiraly that afternoon, we bring it to Matyas. "Ah, you found *Spelta*," she says. She hadn't accepted money from us for some long-distance phone calls she'd made on our behalf, so we leave the *Spelta* products with her to cook for her little family.

Except one pasta package, that *Spelta* we take to Vinczent-Kecskes Istvan.

Istvan is the driving force behind the *agroturismo* in Kalotaszentkiraly. He used to be a teacher in Huedin, he says. "I came (to the hospitality industry) as an outsider. In 1996 we started the *agroturismo* from zero. It took off about 2002."

Today the village has 40 *pensiunea* with two rooms to 10 rooms for visitors, altogether 300 beds. This year they'll have 130 buses bring people here during their season which runs from April to October. "We're at 600 meters (about 1800 feet) elevation, so if we get snow or not is always uncertain. That's why winter is not our season. We do have a hog killing festival right before New Years," Istvan says.

Hungarian foundations in Cluj organized the start-up support vital to the enterprise, he remarks. For the first few years, villagers were a little taken aback by "strangers walking around," but by now they're used to them, he notes. In fact, everyone says a friendly hello when you meet them on the street.

To fix up rooms and rent them to tourists requires a diploma, Istvan explains. "You have to take courses."

Central to this rural tourism is the dance festival-cum-workshop in August. "Our dance camp has become well known. We've had groups from as far away as Canada. Last year we had a group from Japan. In general, though, about 80 percent of our visitors are Hungarians, from Hungary and from countries like Slovakia."

The concern, of course, is the farmer exodus Matyas had described; if it continues, Kalotaszentkiraly will be but a movie set in character rather than a real-life farm village. As we give Istvan the *Spelta* product we tell him about Garfagnana in Italy, also a region of very small farms that, thanks to agritourism coupled with specialty grain production – Farro! – managed to stabilize its farmer population. We tell him what Garfagnana growers get for their Farro, namely 0.80 Euro per kilogram, a whopping four-fold of the Romanian wheat price at farmers

markets, a five-fold of commodity price. We can see that number has impact on Istvan's thinking because it's a good enough return to maybe keep the younger, Internet-connected generation on the farms. Maybe even make that old watermill truly functional again...

Meanwhile we drive back to our *pensiunea* before the cows come home.

On the way to the Spelt farm we see more of the Carpathians that form roughly a D around the Transilvania Depression which itself is not altogether flat but, mostly, slightly contoured. As for the mountains surrounding, some ranges rear up to alpine glory, evergreen growing up high, mixed deciduous forest below interspersed with pastures. But much of the Carpathians are rounded mid-size mountains embracing fertile valleys that widen and narrow as they wind around the mountain flanks. In many areas the valley villages consist of square, one-story dwellings, they're small, more cottage in character than house; they face the street, built very close to one another which must have something to do with how the little towns were platted, we're thinking. Often, rather than building a second story, the dwellings were elongated perpendicular to the street. The visual effect isn't unlike their long-strips farm scape. Also, in many areas there is no width to a village, all the houses line up along just one street – today the paved highway – continuing on for several miles. Yards and outbuildings are accessed from the back.

But you come to completely different village styles; the Maramures region features farm yards accessible from the street through a proud wooden gate elaborately carved, even the fences are painstakingly wood-worked. Elsewhere two-story houses are in the majority. Most little towns are a mixture of styles, with some big solid houses, ostentatious, newer-built.

Multitudinous in character, Transilvania grew to what it is today from much virulent history. Writ large are the Dacians of Thracian ancestry, whose kingdom here accumulated great wealth from salt mines and gold mines. The Romans came for that wealth in the second century AD, making Dacia an outer province of their empire. The Goths put an end to that. Huns, Gepids, Avars, Slavs, Cumanians, Tartars raided and invaded; then the Bulgarians ruled, and finally the Hungarians conquered Transilvania. In the 12th century Hungary encouraged Germans to settle here and defend the eastern borders; they're called Transilvania Saxons, but by their linguistic inclination most were actually Germans from Franconia. For some time the Turks ruled. Then it was back to Hungarians. And the Habsburgs. In the mid-1800s the Wallachians and the Moldavians together founded a small Romania south and east of Transilvania; then, by a post-World-War-One treaty, Transilvania was included. That makes today's Romania the largest nation in the Balkans.

In their intelligently written guide book *Transylvania*, © 2007, Zoltan Farkas and Judit Sos point out that the Hungarian and Romanian versions of Transylvania history diverge so drastically that one wonders if it's the same place they're describing. We're advised never to bring up the history topic in Hungarian-Romanian mixed company: "The results could turn out extremely unfunny and you may get caught in the crossfire."

Almost all the Germans left Romania – a good many were sold to West Germany during communism, others fled after communism collapse. Conversely, Hungarians still live here in large numbers: the city of Cluj Napoca/Kolozsvár/Klausenburg, for example, numbers 250,000 Romanians, 50,000 Hungarians, 500 Germans. Farkas and Sos point out that Transylvania Hungarians (including the Szekely, a sub-group of Hungarians) make up the second largest ethnic minority in Europe (after the Catalans of northern Spain).

So, who're the Romanians whose language consists of 17 percent Slavic words, 7 percent Turkish, and the rest based on Latin? By their own lights they're the descendants of the Draco-Romans. This ancestry version was encouraged by Italy who in the 1920s presented Romania with gifts of Roman statuary, such as the wolf suckling Romulus and Remulus, and monuments of King Decebal of Dacia that you see in Cluj and other cities. Their origin as Dacians gives Romanians claim to having lived in Transylvania the longest.

The Hungarian version, which of course supports Hungary's claim to Transylvania, points out that Rome's 165-year rule of Transylvania was not long enough for the Dacians to adopt Roman culture and Latin language; instead, Hungarians say, the Romanians hail from the western Balkans where Rome ruled for many centuries, in effect "Romanizing" the tribes who would, much later, migrate to the safety of mountainous Transylvania to evade invading Turks. This would have been long after the Hungarians had coined the name that translates to Transylvania – *Erdon tuli*, "Beyond the Forest."

For the traveler the multicultural aspects of Transylvania make for a fascinating journey, since different ethnic groups (the list is long of smaller ethnic groups) are getting along better than those of former Yugoslavia. But that's on the surface, tensions remain between Romanians and Hungarians, not in the least because in today's Romania's democratic system, the political party of Hungarians gets just enough percentage of the vote to act as king maker for one or the other of the major Romanian parties.

And, ethnic memories still lie close to the surface. The Romanians charge that for many centuries they endured what amounted to "a medieval apartheid" under the yoke of German and Hungarian nobility. As far back as 1437, Transylvanian

peasants warred against their oppressors.

Agriculturally, the differences from one area to the next are accents in tradition. In Maramures the pole beans are a big item, raised in rows that divide or surround vegetable production. Hay's put up in loose stacks vertically around central pole; or, it's draped over long, horizontal pole racks. In very few places do you see baled hay. Cutting hay with scythes is mostly men's work, women do much of the raking. Rakes and pitchforks are almost always wooden implements. Once dried, hay gets around on the wagons those pretty horses are pulling.

This small-scale agriculture – you could call it quaint were it not for the physically very hard labor – is set off from strangely forlorn areas marring the landscape, where former farm ground has gone to weed and grass. You see this everywhere in Romania, as in the other former East Bloc countries, land put into production under the collective system of communism that now lies privatized idle.

As we near the city of Arad, the Carpathians give way to the open, gently rolling lands of the Banat, an agriculturally renown region that stretches into Serbia and Hungary. We see bigger fields, more machinery, newer machinery. In a village south of the city we find the Spelt farm.

Surprise: at BioFarmland they speak with a Swiss accent.

We follow storks to the Spelt field, riding with Christian Häni in his SUV. His parents, he relates, had looked to invest in an enterprise with a vision. Spelt is big in Switzerland. So is demand for organic – “bio” and “eco” – products. Häni and his brother-in-law began working their ground here at Firiteaz 10 years ago when, Häni says, “land was selling for a good price in Romania.”

The move from central Switzerland to Romania wasn't the only unusual step they took. “Nobody in our family comes from agriculture.”

So idealism came first? You could say that: they made a deliberate choice in how they wanted to live, and designed a “*generationenübergreifendes Familienprojekt*,” a family-based project that spans generations, Häni relates. “Our philosophy is to be in harmony with nature, to have an agricultural production system that's human-friendly and makes for a nice life.”

That sounds like a back-to-the-landers' dream, doesn't it. But this isn't 1970s America when young rebels escaped the establishment to live off the 20 or 40 acres they'd found in some out-of-the-way place, often scenic but agriculturally marginal land; no, we're in post-communist Romania now and Swiss logic is at work. Their BioFarmland comprises 800 hectares (over 2000 acres) of prime

farm estate, in a region once proudly hailed as the *Kornkammer* of Europe, the continent's grain basket (which, beyond the Banat, also embraced the huge Romanian Plain).

If Hänni doesn't come from a farming background, he did study agricultural engineering in college, and the family researched progressive eco-farming systems extensively. They've modeled their farm operation on Manfred and Friedrich Wenz's "plow-less" system, the equivalent of what's termed conservation tillage in America. The Wenz's are notable 1970s organic pioneers of Germany who're now manufacturing no-till equipment. "We only work the top 5 centimeters (2 inches) of the ground," Hänni tells us. "That our soil is a living soil is at the heart of our farming. In the first two years we only grew clover for soil building."

They're strictly a grain farm at this point, relying mostly on the nitrogen-fixing effect of clover to create the fertility conducive to high-quality cereals. Typically their rotation begins with clover into which rye is planted, Hänni elaborates. We make a detour to a field where the rye has been harvested, the understory clover greening nicely. Elsewhere they raise vetch for green manure, for which this year's growing conditions were phenomenal: "I untangled some of the plants before we mulched the field, they were 2 1/2 meters long!" (100 inches).

"We grow 80 hectares wheat, 60 hectares winter-barley for malting, 80 hectares rye, 60 hectares oats, and 120 hectares *Dinkel*, the Spelt varieties Oberkulmer Rotkorn and Ebners Rotkorn," Hänni says of their production. The rest of the rotation is for soil building. "Basically it's two years clover, three years small grains."

When we arrive at the *Dinkel* harvest the storks are busy behind the two John Deere combines. "They're after grubs."

Hänni says that for their Spelts they buy "Z 2 Saatgut" from Austria – the equivalent of registered-class seed. They plant at 180 kilograms per hectare (150 pounds/acre); at the average annual precipitation of 500 to 600 millimeters (20 to 24 inches) their Spelt yields amount to around 2500 kilograms per hectare (35 bushels/acre).

He leaves no doubt that Spelt, of all the grains they grow, is the best suited to organic farming. "*Dinkel ist wunderbar*," he puts it. "It's a reliable crop, every year, even in extreme (weather) situations." At home, he adds, "*Dinkelbrot* is the only bread we eat."

For their dehulling and conditioning they set up a line of German equipment; for grain storage they designed two flat-storage facilities that are divided into 4

meters by 4 meters compartments with removable slats. “That way we can store different grains in bulk, in the same building.”

Marketing-wise, the decision to raise organic Spelt came easy: “Switzerland imports a lot of Spelt and other organic grains. Spelt gets shipped to Switzerland from as far away as Canada – Romania is a lot closer than Canada. We also ship quite a bit of our grains to Germany.”

What about Romanian sales? They sell to a couple of local companies, but in rather small volume. “It’s not like we’re shipping trucks.” The trend is to processed product, raw product selling less and less in the marketplace. “People want to make less work for themselves. My sister has begun milling the *Dinkel* on a small scale, so we’re expanding our market a little bit in Romania by selling flour.”

If the Swiss market buys the Hăniș’ Spelt as *Dinkel*, do they call it *Alac* when selling in Romania? “No, we call it *Spelța*. There seems to be some confusion about *Alac*.”

And how are they getting on with their Romanian neighbors? “In learning the language it helped that I knew some Spanish and French. Since we’re a small investor compared to the foreign corporations that buy thousands of hectares, we’re accepted here. The other farmers are watching what we’re doing. In the beginning they told us that bio-farming couldn’t be done, ‘not on this soil,’ they said.”

Certainly their enterprise contributes to the village economy: “We have eight year-round employees.”

We finish the interview in Hăniș’s spacious office where a Romanian flag hangs on the wall above sheaves of Spelt and black-bearded Emmer. “Yes, we grew Emmer one year. And we also grew Einkorn, a land-race from Austria’s Waldviertel. But we weren’t happy with the Einkorn yield; whereas the Emmer yielded only slightly less than the Spelt, the Einkorn yield was considerably less. Although, it would be interesting to grow a Romanian Einkorn land-race.”

They also tried Camelina cropping, with less-than-hoped-for results. Eventually they want to have a closed-system farm – just as they have learned to do without any outside inputs in growing their crops, they want to produce enough biofuel for their farm machinery, too. Camelina will likely take on much importance in that context.

“Look, we’re a young enterprise. I’m sure we’ll experiment with all kinds of crops and systems as time goes by, I’m sure we’ll arrive at various interesting

methods,” Häni sums up. It’s obvious that their idealism has not let them down, just the opposite – the BioFarmland brochure he hands us is peppered with uplifting aphorisms: “Nothing’s more powerful than an idea whose time has come...”

We tell him our plans to visit the organic processor in Deva.

“Marius Gabor, yes, you have to see him. He’s quite the man. Tell him hello from me.”

“Biotyful” proclaims his T-shirt. He walks with long strides when he paces in rhythm with a customer-conversation, cordless phone on ear. Small piles of what look like broken energy bars on his office desk, on napkins. His long hair tied in a ponytail, he charts food processing formulas in quick strokes. Explains the formulas to an employee while dipping into various cardboard boxes, to pull out in rabbit-from-hat-motion bagged raw-product samples, for emphasis.

Mister Biotyful: your quintessential business dynamo, a man driven by a curious vision based on Rudolf Steiner’s teachings coupled with what a priest discovered in the Vatican.

Meet Marius Gabor.

The journey from the Banat to the city of Deva had led us into another mountainous part of Transylvania, the Mures Valley at the bottom of the D the Carpathians describe. Gabor’s company Petras Bio is located on the outskirts of the city, inside a compound of several long buildings that perhaps were constructed for small manufacturing in communist days, then remodeled to serve a number of small start-up companies. The place is reminiscent of American-style business incubators.

Petras Bio is spread out over three units, one a plain storage, one a small food processing facility, the third a warehouse-cum-offices quarters from where the boxed products ship.

After an education in electrical engineering, Gabor had worked as a “curative educator” with handicapped children. “I had no training in the food industry or in agriculture,” he relates. “But I was always interested in the concepts of (Rudolf Steiner’s) biodynamics, it was a hobby of mine for many years when I volunteered.”

His wife bore him two children. “She’d been working in a textile factory, and then when she had our children, for each child she got two years paid holiday

(maternity leave). We decided to start this business and make pasta. I went to Switzerland and spent three weeks learning about Spelt pasta. But mostly I learned by doing it – in seven years you learn things. After seven years I now know a lot of things.”

He emphasizes that their pasta is different from commercial pasta product, which is extruded. “Our pasta is not extruded, it’s laminated ‘looped pasta’ after the dough has been through a roller.”

Business-wise it was an uphill challenge. “In Romania the market for bio (organic) products is very, very small; 99 percent, make that 99.99 percent of Romanians are not familiar with bio, the communists didn’t cultivate those concepts. The little bio market that exists is in the cities. Stores like that Casa Bio in Cluj.”

Germany is the big taker of the 60 products Petras Bio has on offer: “Germany has a huge bio market, huge.” However, competition on the organic front has petrified: “In the beginning it was a warm market, now it’s a hard market.”

Gabor makes no direct sales but markets exclusively through distributors. “That’s why we do no promotion.”

Hold on; we just overheard a 15-minute no-holds-barred blitz of product advocacy, in German no less, if that’s not promotion... “Well, yes, when I’m talking to a customer,” Gabor allows.

The fact is, Gabor is onto a product type new to the main street natural foods marketing; being the idealist he is, he enjoys explaining background and benefits of what he terms “live food.”

“Have you heard of the Essene Gospel of Peace?”, he asks. “A priest claimed he found these scrolls about 100 years ago in the Vatican,” he elaborates. “In this Gospel are instructions to eat sprouted grains. It says to sprout grain, grind it, make flat bread and dry it in the sun.”

At Petras Bio they now sprout a great variety of small grains, including Spelt, buckwheat, quinoa, amaranth, white and black sesame, and chia, Gabor elaborates. So he’s basically making malts? “No, not at all, the big difference to malt is our drying temperature,” he notes. “We dry everything at less than 42 degrees (Celsius, about 108 degrees Fahrenheit). With this low-temperature drying process the sprouted grain is still alive.”

They sell the sprouted and dried grains in bulk, and in small packages. And, they’re developing “live food” alternatives to crackers and granola bars.

Gabor himself is the chief live-food alchemist at Petras Bio. “I’ve done hundreds of tests with all kinds of different combinations of ingredients.”

He’s having fun at it. “There is an enthusiasm for sprouted grain products now that’s like the enthusiasm for organic 30 years ago. You have it in America, too, look the company up, it’s called *To Your Health Sprouted Flour*.”

When it comes to energy bars concocted from live-food sprouted grains, he points out, “we’re small but we’re the biggest in the world.”

To enthusiasm and idealism add confidence: Gabor says that for the first four years their business was losing money, but since, their company growth tracks a curve of success. “We grow between 60 percent and 130 percent from one year to another. We now have an annual turn-over of” – he consults his calculator – “oh, \$600,000 to \$700,000. In Romania a bunch of people can live on this, our company now consists of 17 people including me and my wife.”

He feels he’s arrived at a sustainable success formula. “It’s not that we export big quantities to Europe, our products are made with much hand-work, not with big machines. The products we’re doing have a good price-to-quality relation.”

What about Einkorn?, Emmer?

“No, we’re not working with those, not yet. But I heard about Einkorn from a professor,” Gabor says. “He’s doing some unusual research, unusual for Romania. I’ll call him for you. His name is Professor Toncea. He’s in Fundulea.”

Fundulea lies near the capital Bucuresti on the big plain – we’ll be leaving Transilvania today, we’ll go where the sky is big thanks to flat horizons. Somewhere to the south flows the Danube, defining the border to Bulgaria before it hooks north, then turns east again to spread its famous delta in kissing the Black Sea.

Agriculture on the plain is big, mostly, and big, also, are the reaches where former farmland was let go to grass and weeds. Yet even here you drive through villages where horse-and-wagon farmers work their now private land in traditional ways.

Communism’s extensive agriculture industry had its central impetus here on the plain, logically enough what with all these contiguous hectares. The farm-system principles weren’t all that different from those in the United States at the time: monoculture practiced with harsh chemical fertilizers and toxic pesticides. So it’s

appropriate, perhaps, that precisely here on the big plain the Research, Innovation and Technical Assistance Center for Organic Agriculture has its seat today, within the National Agricultural Research and Development Institute Fundulea.

Ion Toncea heads the department. “For 30 years I worked with (chemical) fertilizers. I change my opinion when I start working with organic systems, in 1994.”

The plain around Fundulea is named Mostistea; part of the great Romanian Plain, it boasts the world’s best soil: “*Chermozem*, it’s a soil type that exists only here and in Russia, it’s the famous Black Soil of very high organic matter and deep profile, 25 to 30 centimeters (10 to 12 inches). What’s especially outstanding is this soil’s capacity to collect water from the rain.”

Traditional plant genetics fit well with organic farming, Toncea acknowledges. “Despite the fact that our institute breeds hybrids, I raise open-pollinated sunflower varieties in the organic trials. It’s not so much that I’m against hybrids in principle (agronomically), but I think it’s important to lessen the dependence of farmers on seed producers.”

Land-races: “We work with Spelt in our yield trials, and we’ve increased our genetic resources with two varieties of Einkorn, one from Hungary and one from Italy, and also one variety of Emmer from Hungary.”

Yet it wasn’t one of the archetype grains that greeted us upon entering Toncea’s office, but a sheaf of Camelina on the wall. “I started a study of Camelina in 2004,” he notes. “It’s a very interesting crop. First I’d heard of a German company who promoted Camelina production for oil in the car, and as a solution for some agricultural problems. The Camelina varieties I obtained increase my collection.

“We seed the Camelina from early to mid-November, at 15 kilograms per hectare (12.7 pounds/acre). We can get cold winters here, in 2010 it got down to minus 20 degrees (Celsius, minus 4 Fahrenheit). But the big problem is not frost but drought. Our annual precipitation is 500 to 550 millimeters (20 to 22 inches), but this precipitation is not uniform. In 2011 it was very dry, our Camelina didn’t come up until it had snowed, and when it germinates under the snow you get only part of the normal yield.”

In Romania, too, a commercial driver of Camelina promotion is ITAKA that defines itself as “an initiative launched by a consortium of leading aerospace and fuel companies.”

But back to the ancient cereals. A colleague of Toncea looks up archeological reports from digs along the Olt, the longest river within Romanian boundaries. “They find *Triticum diccocom* (Emmer) and *spelta* in layers that are dated the Bronze Age. *Diccocom* was important in many places. (*T.*) *aestivum* (bread wheat) doesn’t show up until much later.”

The definition Toncea finds for *Alac* is that it describes “hulled Einkorn” and also the wild Einkorn, *boeticum*.

The Romanian organic Spelt production isn’t all that small, Toncea remarks; the reason why it’s locally not well-known is that almost all organic specialty product gets shipped to bio-markets elsewhere. Speaking of certified organic production in general, he quotes from statistics: “In 2011 there were 230,000 organic hectares (about 600,000 acres) out of a total of 15 million hectares total production in Romania. There are 14 certifying bodies. The list of organic products is long, lentil, soy, pea, linseed (flax), sunflower, but mostly it’s cereals. Over 80 percent gets exported. Many organic farmers produce only to sell to foreigners, Germany, Italy, Holland, France.”

Of course, Toncea’s numbers are based on certified organic hectares; the thousands of small farms that raise crops without chemicals would add to the statistic.

According to Toncea, Romanian organic farming carries no controversial connotation as it once did in Germany and America. “The opinion is not against it. Organic farming spreads when the farmers see what their (organic) neighbor does. First they see, then they decide.”

We tell him about the two-year-clover, three-year-cereals rotation we’d seen at BioFarmland by Arad. “That organic system is common in the west and also in mountain areas.” As for our Swiss friends’ idealism, Toncea gets it: “It’s important that you believe in organic.”

He wants to show us his 14 hectares (36 acres) of organic trials. On the drive out there, the subject of genetically modified organisms (GMO crops) comes up. The professors at Turda had told us that Monsanto/Pioneer are pushing their GMO maize against a current of “very strong public opinion.” They’d commented that the information about GMOs that reaches the Romanian public is “not very good.” They’d expressed consternation that there are “a lot of limits on GMOs in the European Union.”

Toncea has a different take on GMOs than the Turda professors, he tells us. Not that this matters much: “Monsanto recently pulled out and is taking their GMO program to Africa.” (As if that continent didn’t already have its shake of problems...)

Toncea's organic research plots are partly harvested already. Some fields get plowed immediately following harvest, he says. "We check many technologies, but we found that we cannot eliminate the plow on the spring-planted hectares."

Of wheats he has a study of 14 varieties in place. "We decided to include seed product in our project. Nine are winter wheats. They produce well, this year was very good, over 5 tons per hectare (70 bushels/acre). This wheat we grow every fourth year in the rotation. We rotate with linseed (flax) or Camelina, and maize, and soy." There are also saffron plots, and we walk by safflower almost mature. When we get to the strip of just-harvested coriander (cilantro) seed, Toncea picks up a handful of sprigs from a windrow. "We had a major rain event yesterday," he says. "We'll have to clean this coriander immediately. We have very good cleaning equipment."

A nice windbreak divides the hectares, a broad strip of trees, really, as you still see in North Dakota. On the far side of the trees a pilot of long-term rotational organic production that Toncea holds particularly important. "Organic farmers can come here and look at this, then go home and multiply our project 10 times, or 1000 times."

He chose an area with three lays of land: "Plateau, depression, and slope, these hectares have all three."

One long-term option is a four-year stand of alfalfa, followed by four years of annual crops – wheat, sunflower, maize, soybean. Another experiment is a lupine field raised for green manure, and there is also a field with three-year perennial rye.

For the walk back to the car Toncea chooses a trail down the middle of the windbreak. Romanian communism apparently hadn't thought much of windbreaks because you see hardly any on the plain. "We planted this windbreak in 1995. It was 10 meters (30 feet) wide, but by now the branches have grown so far out, it's more like 15 meters wide."

Maple, acacia, birch... altogether a nicely diverse mix of deciduous growth which also includes some bushes; evergreens complete the design. If it's a windbreak, walking the path on the inside makes you think of a little cove, a shady grove.

A good place for Toncea to sum up his organic experience. "It was a big chance for me," he puts it. He's all but confident: "Sure, there is a big future for organic in Romania."

In one of the museums – so many museums in Romania! – we'd been told about an archeobotanist of international renown in the city of Yashi. That's in Moldava, not the Republic of Moldava but Moldava the northeastern region of Romania, adjacent to the Republic, ethnically yet another place sliced up by a political border.

Moldava's contours are shapely hills crowned by woods, villages nestling in the folds of the land that gives out to small green flatlands. Conceivably, these flat reaches could have been natural prairies at the time of the hunter-gatherers, or perhaps extending swamps? Either way, one gets a feeling that forest never grew here; today, sheep graze on these small prairies in the summers. And you see many white geese, domestic geese wandering about quite on their own, large flocks of them.

The sunflower claims a lot of this farmland; the road takes us through landscape that looks like the Palouse but sunflower-grown. Not many highways cut up the land, almost all secondary roads are gravel, meandering slowly from village to village where folks give you a second look since strangers seldom have reason to travel here, tourists an altogether foreign species. Everyone's friendly enough though when you stop and ask for directions.

Judging by the scarcity of cars and satellite dishes in the villages, rural Moldava seems Romania's most removed from 21st century modernity. For that you see more horses drawing the farmer wagons. And plenty of dogs.

Moldava: if the countryside cuddles in a time-warp, Yashi buzzes with urban commotion. We pay a taxi driver, following him through city short-cuts to the archeological institute. We'd been told we'd find professor Felicia Monah here.

Because it's summer break the building is deserted except for a philosophy student on the ground floor; he's busy translating an early 1900s German treatise into Romanian. Felicia Monah? No one by that name appears on the list of professors. A quick Internet search reveals that professor Monah is retired. The student makes a call for us. We can visit the scientist at her home. Her daughter will be there to translate.

With her husband, archeologist Dan Monah, Felicia Monah lives in a tiny apartment in one of the huge city blocks communism built. On the miniature balcony, trays of wheat grass. "She grows it for juice, from Spelt seed."

Much of Monah's work explains the agriculture of the Cucuteni, and plant use by the Pre-Cucuteni. No one knows what these people called themselves, or what name their neighbors had for them; archeologists named the culture after the Romanian village where excavations yielded their first concrete evidence.

With the Pre-Cucuteni we're in the Neolithic, Monah notes. Leading up to the Pre-Cucuteni, a cultural connection to Anatolia has been shown, so, yes!, Einkorn and Emmer entered Europe by the direct route from Asia Minor, the Anatolian culture blending with cultures from present-day south-east Poland and the Ukraine.

Particularly pertinent is that here, too, pre-agrarian hunter-gatherers were involved in domestication and propagation of hulled-grain cereals and other crop plants.

The transition period from Neolithic to Bronze Age is the Chalcolithic, when peoples learned to smelt copper, Monah says. This Copper Age of the Pre-Cucuteni dates 5000 to 4700 B.C., followed by the Cucuteni from 4700 B.C. to around 3600 B.C. "At that point the steppe populations invaded from the North and the East, that was a very drastic change."

Her archeobotanical research divided the Pre-Cucuteni and Cucuteni periods into six time frames. Spelt already shows up, and, surprisingly, *Triticum aestivum*, although not consistently through the periods. In fact, the only cereal found at every site through the six eras is Emmer. "*Triticum diccocom* was clearly the dominant cereal," Monah emphasizes.

"When we found *monococum* (Einkorn) it was almost always together with *diccocom* (Emmer). None of our finds were purely one type of grain," she relates. "When we found barley it was always apart from the *Triticum* grains. Sometimes it was together with oats."

The Cucuteni stored their grains in big ceramic jars, measuring over 2 feet in diameter, Monah says. In fact, the culture is known for fine craftsmanship of ceramic art, including figurines that some take as evidence of a religion that worshipped Goddesses.

The transitions caused by the steppe peoples would end with the influx of the people from the south who established Dacia in the 1st century B.C., the famous Dacia of the Wolf God, the Dacia that Trajan would conquer for Rome in 106 A.D., the country continuing as political entity under Roman rule, its heartland the region that's now Transilvania.

Next destination in our search for *Alac*: the Banco de Gene in Suceava, main city of Bucovina which region claims the eastern crescent of the Carpathians, stretching into the Ukraine.

The gene bank is a huge white building. We try the front doors. Locked. The side doors, locked. In the back a door stands ajar, we enter and walk long halls, calling, "Hello?" There is a hollow echo, "Hello?", but nothing stirs. On the second floor we surprise a cleaning woman. She leads us down several long hallways to a door with a sign "secretary." So there is life in this building after all.

Two secretaries sit before computers. We state the purpose of our visit, explaining that the professors at Turda had suggested we come here. "They always send people here," one of the secretaries remarks with a sideways glance at her colleague. She bids us sit at a table set perpendicular to the computer desks. We expect her to phone one of the scientists, to come and speak with us; instead she takes the chair across the table.

Triticum spelta, *Triticum diccocom*, *Triticum monoccocom* – oh, this secretary is very familiar with *Alac*. Names of land-race wheats and maize roll off her tongue. Sure, she knows Professor Toncea and his organic research projects at Fundulea.

Just about now the coin drops – the sign on the door had fooled us, these ladies aren't secretaries, they're researchers with PhDs. The one speaking such good English is Silvia Strajeru, Romania's "National PGR (Plant Genetic Resources) Coordinator." We quickly catch up on our note-taking.

Romania got its national gene bank rather late; the collection was begun in 1987, and the institution officially established at Suceava in 1990. "Prior to that, each research station had their own collection. We built our core collection from germ plasm out of the maize breeder station here," Strajeru says

Maize is so important to Romanians! "Polenta is a main staple food," she notes. Is it always yellow maize? "Of course, what else?" Well, in some countries polenta is also milled from durum wheat. This surprises Strajeru. She goes on to mention *Mamaliga*, the famously traditional Romanian version of what Americans call corn bread.

"People still grow many, many land-races of maize, to this day. But genetic erosion has started to happen, by that I mean that varieties are disappearing from cultivated lands. That's especially sad because the traditional land-races do very well on small farms that don't use chemicals. Organic farming is important for the environment and for people's health."

Strajeru says that the gene bank is not specialized as are the various USDA collections, small grains only at Aberdeen, Idaho for example. Instead, at Suceava they store collections of the whole range of crop plants including vegetable seed, tomato, potato, onion, garlic, peppers, etc., and also oil seed

including Camelina. As for small grains, of course the *Triticum* cereals feature prominently. “We have 1200 accessions of *Triticum*, from altogether 12 different species, not all of them from Romania.” She lists *T. aestivum*, *T. carthlikum*, *T. diccocooides*, *T. diccocon (diccocum)*, *T. durum*, *T. persicum*, *T. polonicum*, *T. spelta*, and *T. timopheevi*. And, *Triticum monoccocum*! They also have one *Turgidum* and 14 *Aegilops* species, 40 accessions altogether. “We try to keep not only seed of cultivated plants but also seed of some of their wild relatives,” Strajeru says.

“*Triticum* is very adapted to Romania,” she emphasizes. And vice versa, we’re thinking, remembering what we learned of the soils at Fundulea.

Romania’s economy is not strong, and this doesn’t just reflect on very poor highway conditions in many places, but also affects institutions such as the gene bank. “We were 37 people here, but now there are only 15 of us. It’s difficult with so few people. Eight of us are researchers, curators, the rest are administrators and technicians.

“In our collection department the researchers are biologists and agronomists, and one is an ecologist. We try to organize two collection missions a year. It helps when we get moneys from extra-budgetary sources, such as the European Union. That usually ties in with multinational collections, researchers come here from other countries and ask us to assist them.”

One strategy Romanian land-race seed collectors employ is to query the village priest, Strajeru remarks. “The village priest seems to know everything that goes on in the community, including what people grow in their fields.”

As for the gene bank, the actual grain samples of all those accessions are stored in vaults at 4 degrees Celsius (about 40 degrees Fahrenheit). “Every five years we monitor, we do a germination test. If germination drops below 85 percent, we refresh the material by growing out plots. We have a 1-hectare experimental field” (2.6 acres).

The researchers’ task on collection missions includes checking locations where germ plasm samples had been gathered previously. Thus the computer tracks the land-races still farmed in rural Romania. “Many of these land-races exist only in gardens any more.”

Strajeru is bothered by this. “I’m very much in favor of keeping the diversity that developed in the fields of the farms,” she puts it. Not surprisingly, she’s appalled at the trend to genetic monoculture by way of biotechnology, that is, GMOs. “Five counties in Romania already grow GMO maize.”

She would like to see the opposite: “I try to support and promote in-situ conservation, the conservation of land-races on farms where they have been traditionally grown.”

Judging by the genotype data, up to not so long ago the Romanians must have had a soft spot for Einkorn, because collection missions yielded only seven accessions of Spelt, but 50 accessions of Einkorn.

Sadly, that changed. “Even in the 1990s there was *monococcum* in many villages. But on our last collection mission, in 2007, only one family was still growing it. They were growing 2 hectares.”

We push the note pad across the table. “*Almasu Mare Village*,” Strajeru writes down for us. “It’s in Alba County, in the Apuseni Mountains of Transylvania. The actual location is in a small village near Almasu Mare.”

After we’ve thanked the researchers for their time, and they’ve let us out the front door, we take a deep breath. To the mind come all those stands of grain along the highway, off the highway, where we’d stopped and got out to see if the little field, the small strip, was possibly *Alac*. Now we realize that we’d been looking for the figurative needle in the hay stack.

But you know what, observing closely all those many, many different land-race wheats as they matured in Romania’s July, was well worth it. We doubt there are many other places in the world where one can find such grand cereal diversity functioning on farms. Maybe, just maybe folks like Strajeru will persevere in conserving this genetic treasure still so alive in Romania’s traditional agriculture.

Now we have a specific location for our Einkorn. After our initial drive-about in Transylvania, our route from interview to interview had led us to Transylvania’s south west, then onto Romania’s grand Plain, then to Moldava and to Bucovina, in one long swoop. Now we’ll complete the circle, this time entering Transylvania from the eastern Carpathians to travel close to its center, to Almasu Mare.

You could say we’ve gotten to know Romania on the long journey.

You could say Romania is a land of so many colors in such multifarious shades and hues, tint and tinge, it’s impossible to sum up. But atop a mountain pass where the highway pavement buckles, cracks, falls away, we do snap a photo that does encapsulate Romania in one image: old woods form a brow over slopes of grazed mountain meadow surrounding a wooden house that’s traditionally small, small as a cabin, built square, contrasting the roadside plywood stand that’s thrown up to sell honey jars to tourists, and by that stand a

few cars are parked, travelers stopped to admire the endless mountain range horizon, Bucovina to the east, Transilvania to the west. Just then a Lincoln stretch limousine painted pink pulls up just as a farmer with his horse-drawn wooden wagon reaches the pass. Yep, that's Romania in one shot: the absurdly rich and the folks of yesteryear's simplicity meeting on a spectacular mountain pass whose roadway's crumbling.

You could say Romania is a country fractured, splintered, cleft – economically, what with dire poverty in city quarters where high-rises form unpainted canyons, plaster disintegrating on walls that threaten to tumble, lacking the merest upkeep, so gray that every bit of hope for any sort of aesthetic is absent. The stark reality is that wages are too low for someone to get ahead with a regular job. In the towns, people wave to passing cars, asking for a ride; mostly they're on their way to work in the next bigger town, or they're going to the market there; when you let them out at their destination, they always, always want to give you 2 Lei or 5 Lei (1 Lei, also called Ron, is about 30 cents American), obviously that's the custom where buses don't run. What a contrast to the rich in their \$60,000-plus sports cars... Corruption is rife at high levels of government; even if the people on the county level of government are honest – and a lot of them are –, the corruption higher up stifles their effectiveness, we're told by a journalist we meet at a *pensiune*. "What's most lacking in Romania is government support of small enterprises." If there is a middle class, to a large extent that consists of people who'd worked abroad for some years, in Spain or Italy, Germany, England, returning to Romania with a stake.

You could say Romania is a graveyard, tortured by history like all of Europe only more so. If you really want to delve into the details of this land's history, take an aspirin first to counter the fuzziness – the region is like a blackboard written upon with chalk, then wiped, then written on again, over and over and over and over, each new chalk line leaving a shadow of a smear when wiped, the figurative blackboard now a particle-dusted gray-board. Transilvania's brightest spot in history: 1568, when the parliament in Turda granted a high level of religious freedom just when the rest of Europe tore itself to pieces over Luther et al. Transilvania's 16th-century benevolence of religious diversity is reflected in the many styles of churches in the towns, often in surprising vicinity of one another.

You could say Romania is hurtling into the future while arrested in multiple time-warps when you see the farmer on his horse-drawn wagon talking into his cell phone.

You could say Romania is moving forward, what with all the building that's going on. In a way that contributes to charm, since many villages and towns already pose with diverging building styles thanks to their checkered history. But many brand new houses are garishly huge, charm-killing as that limousine for which

stretch is not enough, it has to be pink, too. Perhaps, after decades of pathetic Ceaucescu communism, the arrant rush to catch up to capitalism's Star Wars fantastic has numbed the fine sense of proportionality evident in village design of the past. That many of the garishly grandiose new houses stand unfinished – the builders having run out of funds, presumably – only exacerbates the visual hick-up.

You could say so many things of Romania.

You can say: in Romania you find a *Märchenland* straight out of the Brothers Grimm tales. We coined that term, only to discover that on an Internet site featuring Maramures, English journalist Sarah Shuckburgh had beaten us to it, calling that part of Transylvania “a rural fairy tale,” and noting that Prince Charles of England purchased a house in Maramures precisely to help preserve “a way of life which most of the continent cast off centuries ago.”

Note the plural, “centuries.” Not 100 years ago, but 200, 400 years...

Maramures certainly is the most picturesque region of Transylvania – all those carvings on wooden gates, many womenfolk still wearing traditional garb, much agriculture without machinery –, but many areas in the other Transylvanian counties meet the same fairy-tale criteria. Came industrialist capitalism, came communism, came globalizing capitalism, in large areas of Transylvania the rural folk ignored the new, held on to the traditional because they had – what, wisdom?, intuition?, stubbornness?

By interpreter and in broken Spanish we did ask the above question, several times, and invariably the response was a straight-forward “we-like-this-life,” the tone of the answer neither wise nor stubborn but definitely emphatic. Ascribe it to conviction then.

One custom in many villages is to line the streets with plum trees. A parade of plum trees, sometimes with pear and apple interspersed, in the public sphere means never having to buy those tree fruits, they're there for the taking. Other villages grow a canopy of long grape vines over the sidewalks. If you're tall enough and stand on tiptoes, the fruit grows into your mouth quite literally. Along many highways big trees form an allée, and in Romania that makes all the sense – shade for the horses on the highway, and some shelter for the wagon driver during a cloudburst. In some regions those highway-shading trees are big walnut trees; again, in this public space they produce food for the taking, and you see a lot of people by those highways in September, stabbing the higher tree branches with wooden poles to cause the nuts to fall for easy gathering.

We're eight weeks in rural Romania, mostly staying in some village *pensiune*, the

bed-and-breakfast equivalent in Transilvania, Bucovina, Moldavia. Eight weeks amount to a lot of shots of plum liquor, rural hospitality dictates it, as guest you're served from a glass canter that gets filled out of sight, certainly not from a store-bought bottle, the "this-is-locally-made" told with a wink. They take offense if you turn down the second shot.

Thus we spent more time in Romania than at our other Einkorn quest destinations.

It's a good experience to watch small farms still raise their own food stuffs, to see true subsistence agrarianism with occasionally a little cash on the side. America, too, farmed this way for a long time. In fact, wasn't precisely this small-farm ideal the original American Dream, back when the United States was still an agrarian nation?

When almost all American and European farmers accepted a system driven by technology and money, they exposed themselves to never-ending pressures; mechanized because now capitalized by the banker, they came under risk of losing their land in shortfall years, and due to the periodic shrinking of mass-market margins they were coerced to get bigger. And bigger. Around 1900 half of America's population still lived in farmland, today farmers make up less than two percent of the population.

Romania's farmers of small holdings are drop-outs without ever having dropped in, so to speak. Not fervently like the Amish who conscientiously refuse technologies, the small Romanian farmers prefer traditions to technology because traditions work, they worked back when, they will work tomorrow.

As for all those pretty horses: domestication of a species is a two-way pact, the plant or animal bending to human will in exchange for safety and species spread. In Romania that pact is still honored, the horse a working companion and not reduced to tiny numbers of animals for pleasure-riding. OK, America still has a little bit of cowboy culture, and Argentina has the gauchos of the pampas, but otherwise and elsewhere, shouldn't we be ashamed that we disregard the horse after so many centuries of its loyalty to us?

The Romanian small farmers' bond with the land clearly includes a bond with plants and plant genes. Love of plants extends to flowers, Romanians surround themselves with bloom in spring, summer, fall, and so Romania is colorful not only metaphorically but visually. Europe's most beautiful lands lie in Romania.

The good news is that in many villages young farmers work alongside the elder generation, young farmers who're now raising the next generation of an exceptional culture.

Overall, though, small-farm numbers are shrinking in Romania, too. We live in curious times: in states along the west and east coast of America, and in some European places as well, young folks are so eager to get their hands dirty in organic farm soil that they work for free, sometimes for bed and board, in a sort of apprenticeship that Community Supported Agriculture enterprises offer. And every one of these CSAs reports that they have to turn away many, many young people because there is only so much seasonal work to be done. Another trend confirming the young generation's wont to get close to the land is urban "guerrilla gardening." Yet CSA and community garden require a re-learning of organic practices, while on the other side of the world, in Romania, a tradition-continuing agrarianism is in decline. Yep, curious times.

On a blue-sky morning we arrive in Transylvania's Almasu Mare. We buy a coffee at the village's *Magazin* and sit at the table out front. Not a one of the folks we ask speaks English or Spanish. We try the town hall. On the stairs an older man greets us. English? Come, come, he gestures, and leads us to what appears to be a meeting room. Four gents sit on one side of the long table, literally shuffling papers, stapled articles they're putting in order for the upcoming conference, presumably. In front of each the obligatory computer.

Two speak French but not a one commands English or Spanish. They're friendly enough, pitching a suggestion to our guide who nods, then leads us back down the stairs and over to the adjacent building, the school. No, the English teacher isn't here, won't be back until after the summer break.

As our self-appointed town hall guide listens again as we try to explain our quest to a few school teachers— a grain, *grano*, a wheat, *grau*, very, very *antiqua* – he says: "*Alac?*" The first time we meet a non-professor Romanian who knows the term *Alac!* That has to be a good sign.

The guy at the Almasu Mare museum will know, we're told. We'd stopped there already but found the place locked. The friendly gent makes a phone call from the town hall office. Yes, Museum Man is there, working in the hay field across the street from the museum.

This time he's expecting us. In broken English he confirms that, yes, *Alac* is still being grown, we'll find it at Glod, a small village about four miles down a valley.

Glod. In a land of mostly poetic-sounding place names, the one-syllable Glod fits the location at the end of a rather rough dirt road. Like an alone standing stone, Glod's a wizened apparition.

Glod must have been a hamlet in times immemorial – the lay of the land invites farming, the tall wooded slopes surrounding proffer sheltering isolation. Tucked-away like that, Glod plodded on, letting traditions steep no matter what changes beyond the forest. Which changes up to and including modernity apparently weren't keen on Glod, either.

The few dirt streets curve among the farmsteads which adjoin one another, and we see some small fields mid-village. One of them is now stubble, lined on both sides by alfalfa as is typical, a yellowing strip rising toward the small church on the village's high point. You have to balance across a board over the creek to get the right angle. A place such as this for Einkorn? Nothing comes easier to the imagination.

Farther on, in an open-sided shed a wooden thresher. A hundred years old maybe. Obviously no longer used. But kept.

Still farther on, a land-race wheat has been swathed, the grain heads still on straw drying in the sun. Hand-threshing for this lot?, we wonder.

We speak by gestures with a farmer couple in their farmyard. Chickens peck, hogs grunt. We're given to understand that for all practical purposes we're at road's end here. In all other directions the way to the farther-out fields is for tractor or horse only, much too rugged for a car.

The question, of course, is what is this Einkorn at Glod, genetically? Nobody knows. Rural memory goes back, what?, five generations, six, maybe seven. Is this still a strain of the first-arrived Einkorn from Anatolia? Or is it a genotype that was carried away, hither and thither, to come back here centuries ago with Saxons or Hungarians or Danube Swabians?

In any case we have clear evidence that Einkorn of old at Glod overlapped Einkorn on the rebound, returned here from Austria to the bio-farm near Arad.

And what of leaving Glod? It never came to that.

If you've read this far you surely must be wondering about our report. All this verbiage about Transilvania and not one mention of vampires? Bram Stoker, writing his *Count Dracula* in 1897, could not have guessed what he was saddling poor Transilvania with – the fact is that vampire beliefs existed across old Europe, and in Transilvania neither more nor less. Even today, in Germany, Denmark and other foggy countries, occasionally an excavation of old graves reveals beheaded corpses, heads placed between legs; historians usually take this as proof of vampire belief, the posthumous decapitation one custom to

prevent suspected vampires from doing further damage to innocents' necks.

Here in Transylvania, sure, bats fly at night. Right now we see several swooping close to the table in the gazebo where we're typing. Bats are swift, their silent flight a series of sudden twists, flittering manifestations of fate. Wow, that bat came really close. Ow, what's this on the throat.... ow... aaaaaaaaAAAAGH

Editor's Note: René Featherstone was executed by firing squad that used pure silver bullets, on October 13, 2013, in Glod. Posthumously beheaded, he lies 13 feet under in an unmarked grave. Some say the grave's on Einkorn acres.