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Stalking the Vegetannual

A Roadmap to Eating with the Seasons

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AN EXTRAORDINARY FEATURE OF MODERN HUMANS is that we seem to think we've broken the shackles of our food chain and walked right out of it. If we don't know beans about beans, that may be fine with us. Asparagus, potatoes, turkey drumsticks—you name it, most of us here in America don't have a clue how the world makes it. Sometimes I think I'm exaggerating the scope of the problem, and then I'll encounter an editor (at a well-known nature magazine) who's nixing the part of my story that refers to pineapples growing from the ground. She insisted they grew on trees. Or, I'll have a conversation like this one:

"What's new on the farm?" asked a friend of mine, a lifelong city dweller and gourmet cook who likes for me to keep her posted by phone. This particular conversation was in early spring, so I told her what was up in the garden: peas, potatoes, spinach.

"Wait a minute," she said. "When you say, 'the potatoes are up,' what do you mean?" She paused, reformulating her question: "What part of a potato comes *up*?"

"Um, the plant part," I said. "The stems and leaves."

"Wow," she said. "I never knew a potato *had* a plant part."

Most people of my grandparents' generation had an intuitive sense of agricultural basics: when various fruits and vegetables come into season, which ones keep through the winter, how to preserve the others. On what day autumn's frost will likely fall on their county, and when to expect the last one in spring. Which crops can be planted before the last frost, and which must wait. What animals and vegetables thrive in one's immediate region and how to live well on those, with little else thrown into the mix beyond a bag of flour, a pinch of salt, and a handful of coffee. Few people of my generation, and approximately none of our children, could answer any of those questions, let alone all of them. This knowledge has largely vanished from our culture.

If potatoes can surprise some part of their audience by growing leaves, it may not have occurred to most people that lettuce has a flower part, too. It does. They all do. Virtually all non-animal foods we eat come from flowering plants. Exceptions are mushrooms, seaweeds, and pine nuts. If other exotic edibles exist that you call food, I salute you.

Flowering plants, known botanically as angiosperms, evolved from ancestors similar to our modern-day conifers. The flower is a handy reproductive organ that came into its own during the Cretaceous era, right around the time when dinosaurs were for whatever reason getting downsized. In the millions of years since then, flowering plants have established themselves as the most conspicuously successful terrestrial lifeforms ever, having moved into every kind of habitat, in infinite variations. Flowering plants are key players in all the world's ecotypes: the deciduous forests, the rainforests, the grasslands. They are the desert cacti and the tundra scrub. They're small and they're large, they fill swamps and tolerate drought, they have settled into most every

niche in every kind of place. It only stands to reason that we would eat them.

Flowering plants come in packages as different as an oak tree and a violet, but they all have a basic life history in common. They sprout and leaf out; they bloom and have sex by somehow rubbing one flower's boy stuff against another's girl parts. Since they can't engage in hot pursuit, they lure a third party, such as bees, into the sexual act—or else (depending on species) wait for the wind. From that union comes the blessed event, babies made, in the form of seeds cradled inside some form of fruit. Finally, sooner or later—because after that, what's the point anymore?—they die. Among the plants known as annuals, this life history is accomplished all in a single growing season, commonly starting with spring and ending with frost. The plant waits out the winter in the form of a seed, safely protected from weather, biding its time until conditions are right for starting over again.

Excluding the small fraction of our diet supplied by perennials—our tree fruits, berries, and nuts—we consume annuals. Our vegetal foods may be leaves, buds, fruits, grains, or other seed heads, but each comes to us from some point along this same continuum, the code all annual plants must live by. No variations are allowed. They can't set fruit, for example, before they bloom. As obvious as this may seem, it's easy enough to forget in a supermarket culture where the plant stages constantly present themselves in random order. And that's just the beginning. Biology teachers face kids in classrooms who may not even believe in the metamorphosis of bud to flower to fruit and seed, but rather, in some continuum of pansies becoming petunias becoming chrysanthemums because that's the reality they witness as landscapers come to city parks and surreptitiously yank one flower before it fades from its prime, replacing it with another.

The same disconnection from natural processes may be at the heart of our country's shift away from believing in evolution. In the past, principles of natural selection and change over time made sense to kids who'd watched it all unfold. Whether or not they knew the terminology, farm families understood the processes well enough to imitate them: culling, selecting, and improving their herds and crops. For modern kids who intuitively believe in the spontaneous generation of fruits and vegetables in the produce section, trying to get their minds around the slow speciation of the plant kingdom may be a stretch. The process by which vegetables come into season may appear, in this context, as random as the lottery.

But it isn't. Here's how it goes. First come the leaves: spinach, kale, lettuce, and chard (at my latitude, this occurs in April and May). Then more mature heads of leaves and flower heads: cabbage, romaine, broccoli, and cauliflower (May - June). Then tender young fruit-set: snow peas, baby squash, cucumbers (June), followed by green beans, green peppers, and small tomatoes (July). Then more mature, colorfully ripened fruits: beefsteak tomatoes, eggplants, red and yellow peppers (late July - August). Then the large, hard-shelled fruits with developed seeds inside: cantaloupes, honeydews, watermelons, pumpkins, winter squash (August - September). Last come the root crops, and so ends the produce parade.

To recover an intuitive sense of what will be in season throughout the year, picture an imaginary plant that bears over the course of one growing season all the different vegetable products we can harvest. We'll call it a vegetannual. Picture its life passing before your eyes like a time-lapse film: first, in the cool early spring, shoots poke up out of the ground. Small leaves appear, then bigger leaves. As the plant grows up into the sunshine and the days grow longer, flower buds will appear, followed by small green fruits. Under midsummer's warm sun, the fruits grow larger, riper, and more colorful. As days shorten into the autumn, these mature into hard-shelled fruits with appreciable seeds inside. Finally, as the days grow cool, the vegetannual may hoard the sugars its leaves have made, pulling them down into a storage unit of some kind: a tuber, bulb, or root.

Plainly, all the vegetables we consume don't come from the same plant, but each comes from a plant, that's the point—a plant predestined to begin its life in the spring and die in the fall. (A few, like onions and carrots, are

attempting to be biennials but we'll ignore that for now.) What we choose to eat from each type of vegetable plant must come in its turn—leaves, buds, flowers, green fruits, ripe fruits, hard fruits—because that is the necessary order of things for an annual plant. For the life of them, they can't do it differently.

Some minor deviations and a bit of overlap are allowed, but in general, picturing an imaginary vegetannual plant is a pretty reliable guide to what will be in season, wherever you live. If you find yourself eating a watermelon in April, you can count back three months and imagine a place warm enough in January for this plant to have launched its destiny. Mexico maybe, or southern California. Chile is also a possibility. If you're inclined to think this way, consider all of the resources it took to transport a finicky fruit the size of a human toddler to your door, from that locale.

Our gardening forebears meant watermelon to be the juicy, barefoot taste of a hot summer's end, just as a pumpkin is the trademark fruit of late October. Most of us accept the latter, and limit our jack-o-lantern activities to the proper botanical season. Waiting for a watermelon is harder. It's tempting to reach for melons, red peppers, tomatoes, and other late-summer delights before the summer even arrives. But it's actually possible to wait, celebrating each season when it comes, not fretting about its being absent at all other times because something else good is at hand.

If many of us would view this style of eating as deprivation, that's only because we've grown accustomed to the botanically outrageous condition of having everything, always; this may be the closest thing we have right now to a distinctive national cuisine. Well-heeled North American epicures are likely to gather around a table where whole continents collide discreetly on a white tablecloth: New Zealand lamb with Italian porcinis, Peruvian asparagus, Mexican lettuce and tomatoes, and a hearty French Bordeaux. The date on the calendar is utterly irrelevant.

I've enjoyed my share of such meals, but I'm beginning at least to notice when I'm consuming the United Nations of edible plants and animals all in one seating (or the WTO is more like it). On a winter's day not long ago I was served a sumptuous meal like this, finished off with a dessert of raspberries. Because they only grow in temperate zones, not the tropics, these would have come from somewhere deep in the Southern Hemisphere. I was amazed that such small, eminently bruisable fruits could survive a zillion-mile trip looking so good (I myself look pretty wrecked after a mere red-eye from California), and I mumbled some reserved awe over that fact.

I think my hostess was amused by my country-mouse naïveté. "This is New York," she assured me. "We can get anything we want, any day of the year."

So it is. And I don't wish to be ungracious, but we get it at a price. Most of that is not measured in money, but in untallied debts that will be paid by our children in the currency of extinctions, economic unravelings, and global climate change. I do know it's impolite to raise such objections at the dinner table. Seven raspberries are not (I'll try to explain someday to my grandkids) the end of the world. I ate them and said "thank you."But I'm continually amazed by the manner in which we're allowed to steal from future generations, while commanding them not to do that to us, and rolling our eyes at anyone who is tediously PC enough to point this out. The conspicuous consumption of limited resources has yet to be accepted widely as a spiritual error, or even bad manners.

It's not that our culture is unacquainted with the idea of food as a spiritually loaded commodity. We're just particular about which spiritual arguments we'll accept as valid for declining certain foods. Generally unacceptable reasons: environmental destruction, energy waste, the poisoning of workers. Acceptable: it's prohibited by a holy text. Set down a platter of country ham in front of a rabbi, an imam, and a Buddhist monk,

and you may have just conjured three different visions of damnation. Guests with high blood pressure may add a fourth. Is it such a stretch, then, to make moral choices about food based on the global consequences of its production and transport? In a country where 5 percent of the world's population glugs down a quarter of all the fuel, also belching out that much of the world's pollution, we've apparently made big choices about consumption. They could be up for review.

The business of importing foods across great distances is not, by its nature, a boon to Third World farmers, but it's very good business for oil companies. Transporting a single calorie of a perishable fresh fruit from California to New York takes about eighty-seven calories worth of fuel. That's as efficient as driving from Philadelphia to Annapolis and back in order to walk three miles on a treadmill in a Maryland gym. There may be people who'd do it. Pardon me while I ask someone else to draft my energy budget.

In many social circles it's ordinary for hosts to accommodate vegetarian guests, even if they're carnivores themselves. Maybe the world would likewise become more hospitable to diners who are queasy about fuel-guzzling foods, if that preference had a name. Petrolophobes? Seasonaltarians? Lately I've begun seeing the term "locavores,"and I like it: both scientifically and socially descriptive, with just the right hint of *livin' la vida loca*.

Slow Food International has done a good job of putting a smile on this eating style, rather than a pious frown, even while sticking to the quixotic agenda of fighting overcentralized agribusiness. The engaging strategy of the Slowies (their logo is a snail) is to celebrate what we have, standing up for the pleasures that seasonal eating can bring. They have their work cut out for them, as the American brain trust seems mostly blank on that subject. Consider the frustration of the man who wrote in to a syndicated food columnist with this complaint: having studied the new food pyramid brought to us by the U.S. Dietary Guidelines folks (impossible to decipher but bless them, they do keep trying), he had his marching orders for "2 cups of fruit, 2- cups of vegetables a day." So he marched down to his grocery and bought (honest to Pete) eighty-three plums, pears, peaches, and apples. Outraged, he reported that virtually the entire lot was rotten, mealy, tasteless, juiceless, or hard as a rock and refusing to ripen.

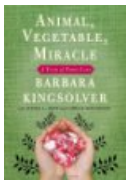
Given the date of the column, this had occurred in January or February. The gentleman lived in Frostburg, Maryland, where they would still have been deeply involved in a thing called winter. I'm sure he didn't really think tasty, tree-ripened plums, peaches, and apples were hanging outside ripe for the picking in the orchards around . . . um, Frost-burg. Probably he didn't think "orchard" at all—how many of us do, in the same sentence with "fruit?"Our dietary guidelines come to us without a road map.

Concentrating on local foods means thinking of fruit invariably as the product of an orchard, and a winter squash as the fruit of a late autumn farm. It's a strategy that will keep grocery money in the neighborhood, where it gets recycled into your own school system and local businesses. The green spaces surrounding your town stay green, and farmers who live nearby get to grow more food next year, for you. This also happens to be a win-win strategy for anyone with taste buds. It begins with rethinking a position that is only superficially about deprivation. Citizens of frosty worlds unite, and think about marching past the off-season fruits: you have nothing to lose but your mealy, juiceless, rock-hard and refusing to ripen.

Locally grown is a denomination whose meaning is incorruptible. Sparing the transportation fuel, packaging, and unhealthy additives is a compelling part of the story. But the plot goes beyond that. Local food is a handshake deal in a community gathering place. It involves farmers with first names, who show up at the market week after week. It involves consumers who remember that to be human is to belong to a food chain, wherever and whenever we find ourselves alive. It means remembering the truest of all truths: we are what we eat. Stepping slowly backward out of a fuel-driven industry of highly transported foods will alter more than a

person's grocery list. Such small, stepwise changes in personal habits aren't trivial. Ultimately, they will add up to the story of who we were on this planet: what it took to keep us alive, what we left behind.

Barbara Kingsolver, author of ten books, was awarded the National Humanities Medal in 2000. Her article in this issue is adapted from her new book, Animal, Vegetable, Miracle: A Year of Food Life*, coauthored with her husband, Steven Hopp, and her daughter Camille. It will be published by HarperCollins in May 2007 and is used here by permission.*



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