

## Of Birds and Beans: A Global Connection

A ruby-throated hummingbird. A leisurely cup of coffee. A farmer in Latin America. A decent meal. And a trip to the Natural Foods Store. Five seemingly unrelated items, right? What's the connection and how are they linked? Can one have an impact on the others? How and why? Let's take a look . . .

Start with the hummingbird: This volitant little creature that graces our gardens and pollinates our petunias is a member of one of at least 52 bird species (as identified by the Seattle Audubon Society)—and one of over ten billion songbirds, shorebirds, raptors, and waterfowl—that travels from New York and parts of North America to the tropics each fall, only to make that fantastic journey again the next spring.

When this colorful and energetic fellow leaves our backyards, his destination is oftentimes the forested coffee plantations of Latin America. There, fauna, from microorganisms to mammals, contributes to an ecological diversity that is nearly unparalleled in the world. In fact, only an undisturbed tropical forest sustains more species of birds, and the multiplicity of insects on a single tree is exceeded solely in untouched indigenous forests. In addition to hosting insect and animal life, these traditional coffee farms support a vast array of flora that provides food and nesting niches for the migratory birds.

So on to your mug of Java . . . which, you may surmise, is made from beans that conceivably came from a tree in which your avian pal was spending his winter while you were shoveling your driveway. Or did he make that long, treacherous trek only to discover that the rich canopy of bushes in which he overwinters no longer exists, having been clear-cut, and that the natural organic materials in the soil were supplanted by petroleum-based fertilizers and nitrates? How could this be?

In the early 1970s, coffee-growing practices in Latin America began to change when evidence of leaf rust fungus, which can devastate coffee crops, made its way into Brazil. The fear of it spreading led to a revolution in the way this globally-important commodity was grown. Since fungi tend to thrive in moist, shady environments, the extension was made that leaf rust fungus would not get a toe-hold if the coffee plants were grown in the sun. Therefore, shade was reduced or eliminated, and sun-tolerant coffee plants were established in lieu of the shade-growing ones. With this transformation of plants and practices, the harvested amount of

beans increased, and price competition fueled the necessity for farmers to uphold a bloated yield in order to remain in business.

Now let's meet the farmer who toils to bring us our morning pleasure. He probably lives in a crude shack with a dirt floor. There is no running water or electricity, and the thin planks of the wall are ineffectual at fending off the cold of night. Perhaps he is lucky and owns a horse to help him haul his harvest out of the forest to the dealer; otherwise, he burdens under the weight of the fifty- and one hundred-pound sacks.

If the farmer owns a small farm managed in the "traditional" way (coffee plants are grown either within existing forests or among other planted vegetation), each plant is carefully tended, as the fruit produced per year by one coffee bush will yield only about one pound of roasted coffee. Like other family farmers, he probably mingles other crops in with his coffee plants, which allows him to provide for his own household needs and/or to have a cash or trade crop to help him meet his family's requirements. Having these other crops helps ease his dependence on the unpredictable coffee market; since coffee and its price are subject to demand and investors' speculations, its price fluctuates. Also, because coffee plants grown beneath a forest canopy tend to be more disease- and pest-resistant, the farmer does not have to carry the expense of agro-chemicals. [Ironically, the leaf rust fungus, which was the impetus for changing the growing processes, is more virulent among coffee plants grown in the sun versus those raised in the shade.]

But what if this farmer is now dependent upon the "technified method" (referring to the growing practices introduced in the 1970s, which use plant varieties developed for growing in the sun with large quantities of fertilizers and pesticides)? What if, forced to compete in this new marketplace of high-yielding plants, he must clear his land and cultivate sun-thriving coffee bushes? Instead of growing or bartering for non-coffee crops, he must now buy them. His coffee plants will need to be replaced every twelve to fifteen years, as they no longer have the thirty- to one hundred-year life span of the shade-loving ones. (The sun accelerates photosynthesis—and hence the plant's growth—so that the coffee tree exhausts itself much quicker.) And now he must use his meager income to buy pesticides and herbicides to keep his cash crop thriving,

perpetuating the cycle.

Our farmer is now dependent upon a single crop, at risk from crop failure or government policy. Or, if he works on a coffee estate, he is likely to be exposed to dangerous chemicals (some of which are banned in the United States because of their toxicity). Either through inexperience, lack of education, or hot weather conditions that discourage the wearing of protective clothing, farmers—and their wives and children (who are recruited to apply chemicals)—come in frequent, close contact with poisonous substances

How did such radical practices take hold? As mentioned, the threat of coffee leaf rust cracked open the door. The thrust for modernization burst it open. Commercial banks encouraged large-scale farming because the cycle of indebtedness provided them with interest income. Timber and chemical industries encouraged technified coffee estates because they boosted profits for them; national governments saw swollen coffee harvests as a source of increased tax revenue. National federations, outside government agencies (including some in the United States), and local authorities promoted the switch to technified farming and poured millions of dollars into this endeavor. Quality of the commodity took a back seat to quantity, and the farmers became regarded solely as the means to increased production and inflated commercial coffers. [Note: The U.S. Agency for International Development, which spent more than \$80 million between 1978 and 1997 to sponsor technified farming, has since reversed its position on open sun farming.]

The farmer, in all of this, becomes mired in debt and poverty. Most often he cannot get credit from a bank unless he practices technified methods; future rights to coffee he produces may have to be offered as collateral to secure a loan. The coffee that he grows and is paid about \$.50 per pound for is usually sold to a broker or middleman (referred to as a "coyote"); from there, it passes through the hands of an exporter; it also flows through an importer, a roaster, and a coffeeshop owner before the consumer pays up to \$9.00 (or more) per pound for it. Everyone—except the farmer—realizes a tidy profit on the beans.

Now on to the good, balanced meal . . . not ours, the farmer's! In the late 1980s, activists in Europe banded together to try to bring equity to the coffee growers. This Fair Trade movement, which spread to the United States a few years ago, has brought together hundreds of small, family farm (no corporate plantations allowed) to market their coffee in small cooperatives.

Farmers sign up for the program and receive education on how to manage their farms and keep books. Because corruption is rampant in businesses throughout these participating countries, Fair Trade teaches the growers how to look out for themselves and how to document all their transactions. Fair Trade representatives "inspect" the farms annually to be sure they operate under sound practices in terms of business procedures, bookkeeping, and growing methods. Managers of the cooperatives are elected, and they handle the money and pay the farmers (although the farmers are expected to "know the system").

If our coffee grower participates in the Fair Trade alliance, he is paid a pledged minimum price for his crop. The organization calculates how much income the family needs to survive (housing, clothing, food, and other basic needs) then, from that, determines the price per pound required to meet that need—and guarantees this price as a minimum that the farmer will receive. The "coyotes" are circumvented, reducing this middle-man cut on both ends of the transaction. Farmers who sign-up with Fair Trade receive at least twice as much per pound of coffee as non-Fair Trade ones.

Now that our farmer is earning an honest wage, he can afford to put that decent meal on the table for his family. Beyond that, with additional income for him and other farmers, more money is brought into his rural community. Sometimes it is used to extend benefits, such as extension services and affordable credit. Other villages have been able to erect schools and health clinics. One township funded an enterprise for the farmers' wives; it established the means for the women to buy and sell livestock, thereby creating the first opportunity for women to earn money.

Not only does Fair Trade consider the farmer and his immediate financial needs, but it also recognizes the need for sustainability by promoting shade and organic farming methods. Initiatives and incentives that make it economically feasible and desirable to practice land stewardship are established. Fair Trade activists work hard to get their message heard in the United States and Europe and to get large coffee companies to buy Fair Trade coffee. (Currently there are approximately one hundred companies in America that are selling Fair Trade coffee, and in Europe, Fair Trade products have expanded to include bananas and sugar.)

Finally, we're at our natural foods store. In our shopping basket we have some fresh farm produce, a loaf of hot bread, some pasta for dinner and, oh yes, we need some coffee for breakfast. But which to choose? What if we reflect on the hummingbird we saw amongst the petunias; then consider Latin America, his winter dwelling and home of the coffee growers; then think back to the front page of this newsletter (which we hope you read!)? Then, if we contemplate for a second and make one small choice—perhaps sending out one small ripple—we see if there's a Fair Trade coffee to try with our cinnamon rolls tomorrow morning!

### **To Think About**

A Latin American coffee grower and a small, family farmer in the United States are not as far apart economically as the miles between them. For example, consider that a farmer today receives less than 40 (or 4%) for a loaf of bread that sells for 860. (Thirty years ago, the loaf of bread cost 270 and yielded the farmer 30, or 11%). On average, roughly 7% of the retail price of coffee goes for the beans. So if you'd rather cast a pebble in a different pond, think about how you can help sustain a local or small farm in your community.