“Harris brings to life the many unsung adventurers who tramped to the ends of the earth in search of useful plants. It’s a vivid history of the explorers who helped shape modern American eating habits.”
—SUSAN FREINKEL, author of American Chestnut: The Life, Death, and Rebirth of a Perfect Tree

“If you have ever wondered how navel oranges and other such foods came to be grown in America, here’s the answer. Fruits of Eden is a welcome history of these little-known plant experts who succeeded in improving the diversity and deliciousness of our daily fare.”
—MARION NESTLE, author of Food Politics: How the Food Industry Influences Nutrition and Health

“A fascinating account of our greatest agricultural explorer, who battled almost every imaginable peril so that American farmers could grow foods like mangoes, avocados, figs, and dates.”—DAVID KARP, University of California
AMANDA HARRIS was for many years a reporter and editor at *Newsday*, the Long Island and New York City daily newspaper. She lives in Manhattan and Montcabrier, France, with her husband, Drew Fetherston. She is also the granddaughter of Alice Barton Harris and the daughter of Robin Franklin Harris, who was Marian Fairchild’s godson.
When did you know that you wanted to write about David Fairchild?

My father, who was Marian Fairchild’s godson, was one of David Fairchild’s many guinea pigs. Whenever he visited the Kampong garden as a child, Fairchild gave him a new food to taste and told him an adventure story about its discovery. (Guava jelly was my father’s favorite plant introduction.) His enthusiasm convinced me that Fairchild’s story would make a good book.

David Fairchild was son-in-law of Alexander Graham Bell and brother-in-law of National Geographic editor Gilbert Grosvenor. What connections do you see between his work and theirs?

They were all independent thinkers who had confidence in their own daring ideas and abilities.

What was the most dangerous moment of Fairchild’s expeditions?

Frank Meyer, an explorer on Fairchild’s staff, continually risked death doing his job. Once he was almost executed for allegedly smuggling opium poppy seeds. And, indeed, he did die on the job under mysterious circumstances.

It’s hard to imagine what the American diet would be like without the plants David Fairchild introduced. What food would you miss the most?

Avocados and mangoes. Half of a fresh avocado spread on toast makes a good breakfast. A mango is great anytime, but David Fairchild used to advise people to eat them sitting in an empty bathtub because mango juice is so messy.
What do you hope readers will enjoy the most about your book?
The stories behind foods they probably take for granted. I want Frank Meyer to finally get full credit for introducing soybeans and Meyer Lemons.

What do you love about Meyer lemons?
When I can find a big bag of them—which isn't often in New York City—I make lemonade with Meyer lemons because they are not sour and don’t need much added sugar.

What do you wish Americans knew about how those foods came to the country?
I want them to discover the imagination and hard work that was needed to locate foreign food plants and cultivate them in America. A Smyrna fig is more interesting—and possibly tastier—if you know that Walter Swingle traveled alone throughout Italy to gather figs and wrapped them in foil from his Italian cigarette packages before shipping them to America.

What is your favorite time period to research?
The turn of the twentieth century was fascinating because everything changed as Americans opened their eyes to the rest of the world.

What changes were hardest for Americans to get used to?
Globalization brought international integration to America—integration of people and plants and ideas about science. Foreign things were no longer alien or strange. But some Americans, including those who promoted eugenics, wanted to keep America for themselves and were threatened by progress or change. David Fairchild's struggles to introduce foreign foods reflected the broader efforts to transform America from an isolated nation to a pluralistic society.

How is your day structured when you write? What’s your writing routine?
I do all my normal things—exercise, errands, finances, for example—in the morning and spend all afternoon writing. I reward myself with dinner.

You are a former editor and reporter for Newsday, the daily newspaper of Long Island. How does your experience writing for a newspaper influence your book writing?
The actual writing is very different. The challenge of writing for a newspaper is to produce stories as succinctly and accurately as possible, so writing a book is hard because I have to slow down the narrative. But newspaper reporting is similar to book research, except in this case the records were almost 100 years old.

Do you have one sentence of advice for aspiring authors?
Get a good idea and stick to it, no matter what other people say.
Introduction

At the end of the nineteenth century, most food in America was bland and brown.

The typical family ate pretty much the same dishes every day. Their standard fare included beefsteaks smothered in onions (a condiment that passed for a vegetable), ham with rank-smelling cabbage, or maybe mushy macaroni coated in cheese. Since refrigeration didn’t exist, ingredients were limited to crops raised in the backyard or on a nearby farm. Corn and wheat, cows and pigs dominated American agriculture and American kitchens.

Farmers grew the limited range of crops that had haphazardly found their way to the New World. Only a few dozen foods—mainly squashes, grapes, berries, corn, and potatoes—are native plants; men and nature had carried the rest from other continents. Most Americans didn’t know what a fresh orange looked like or how to peel a banana.

As the century ended, however, Americans opened their eyes to the world beyond their shores. Many things changed during this pivotal period when globalization began. And thanks to an earnest young botanist from the Midwest named David Grandison Fairchild, national eating habits was one of them.

Fairchild transformed American meals by introducing foods from other countries. His campaign began as a New Year’s Resolution for 1897 and continued for more than thirty years, despite difficult periods of xenophobia at home and international warfare abroad. After he persuaded the United States Department of Agriculture to sponsor his project, he sent
other smart, curious botanists to Asia, Africa, South America, and Europe to find new foods and plants. They explored remote jungles, desert oases, and mountain valleys and shipped their discoveries to government gardeners for testing across America. Collectively, the plant explorers introduced more than 58,000 items.

Supported by his wife Marian’s relatives—her father, Alexander Graham Bell, and her brother-in-law, Gilbert Grosvenor, editor of the National Geographic Magazine—Fairchild was a member of an influential group whose passion for invention and discovery helped propel America out of the isolation of the nineteenth century into its cosmopolitan eminence of the twentieth century.

While other types of explorers worked with well-financed teams to brave the jungles of South America and the frigid peaks of the North and South Poles, Fairchild and his colleagues worked alone or in small groups. They traveled by ship, train, horse, mule, and on foot. Ironically, only three weeks after Fairchild’s star explorer, Frank Meyer, returned from his first walking expedition through China, Fairchild went to Hammondsport, New York, to help Glenn Curtiss test his aircraft, the June Bug. It was before the Wright brothers had flown their plane in public, so Curtiss’s demonstration was the first time any Americans had witnessed human flight. The breakthrough in aviation changed exploration, for plants and everything else, forever.

Despite the risks and prejudices they faced, Fairchild and his colleagues found foods that continue to enrich the lives of Americans. Many of their discoveries have been used as breeding material to improve existing plants, and others have become staples of the American table like mangoes, avocados, soybeans, figs, dates, and Meyer lemons.

And almost all are tasty and colorful.
The Golden Age of Travel

Once before, a high-minded American had launched an ambitious plan to collect and grow foreign plants in the United States. That adventure ended in a bloody tragedy.

The earlier scheme started in Campeche, Mexico, in 1827 where Henry Perrine, a thirty-year-old doctor from Cranbury, New Jersey, was stationed as the American consul. In September U.S. Treasury Secretary Richard Rush asked Perrine and the other diplomats around the world to send promising seeds and plants to Washington for testing. It wasn’t an unusual request; U.S. officials had often sought new food and other products to make the nation more self-sufficient. Rush’s predecessor had issued a similar appeal in 1819; before that Thomas Jefferson and Benjamin Franklin had encouraged Americans living abroad to hunt down plants that might be valuable at home. “The greatest service which can be rendered any country is to add a useful plant to its culture,” Jefferson wrote in 1800, a remark that later American plant explorers frequently quoted with pride.¹ Jefferson had followed his own advice: he once smuggled grains of rice from Italy to Virginia in his coat pocket even though Italian officials could have executed him if he had been caught.²

Like Jefferson, Perrine, who was a botanist as well as a physician, had great faith in useful plants. The only consul to answer Rush’s letter, he sent seeds of many exotic plants to Washington. For a decade, Perrine identified and collected tropical and subtropical plants throughout Mexico that he hoped could be transplanted to the American South. One official said
later that Perrine devoted “his head, heart and hands” to introducing tropical plants.³

In 1838, he persuaded Congress to take a chance on his conviction—some used the word obsession—that the United States had the right climate and soil to grow mangos, sisal, cinchona (for quinine), and other tropical plants. That year lawmakers granted him the right to establish a nursery in southern Florida, a region most people considered worthless for farming or almost anything else.

The grant was general, not specific, since the region was virtually uninhabited. Congress allowed Perrine to use whatever property he wanted within a 23,000-acre site on the empty mainland below Miami, which was then little more than a trading post. Before heading south, Perrine carefully planned his experiment garden and collected seeds of more than two hundred promising varieties.

When he was finally ready to start planting, however, the timing was terrible. Perrine and his family arrived on Christmas Day 1838 when native Seminoles and Florida’s few white settlers were fighting a brutal war. To wait for the hostilities to end, the Perrines settled temporarily on Indian Key, a small island off the Florida coast.

Perrine rented a house from John Jacob Houseman, a New Yorker who ran the island and made a living by servicing—or, perhaps, stripping—ships wrecked on its shoreline. The Perrines and sixty-five other inhabitants believed that its distance from the mainland protected Indian Key. And it had been safe—until the summer of 1840 when Houseman taunted the enemy by offering to catch or kill every Indian in south Florida for a bounty of two hundred dollars each. The situation quickly grew tense.

At about 2 a.m. on August 7, 1840, sudden gunshots and war whoops woke the Perrine family—Henry and his wife, Ann, and their three children, Sarah, seventeen, Hester, sixteen, and Henry, thirteen. A few hours earlier Seminole Chief Chekika and two hundred angry warriors had boarded seventeen canoes and raced in the dark to Indian Key to avenge the island owner’s threat. They attacked Perrine’s big house first, giving Houseman and most of the others time to escape.

The basement of Perrine’s house, which was built on the island’s edge, was a cavity called a turtle crawl filled with water; the space was used to
trap terrapin, then a popular dish in fancy restaurants up north. Ann Perrine and the children rushed into this basement, huddling together in the dark as water lapped at their necks, while Henry Perrine covered its trap door with the heavy trunk of seeds he hoped to plant in Florida. Then he went outside to plead with the Indians to leave him and his family unharmed. Perrine spoke Spanish to distinguish himself from Houseman, the New Yorker. “I am a physician and will go with you to heal your people,” he told them. They understood him and left—temporarily.

The Indians soon returned, however, rushing into the house and chasing the doctor upstairs to a cupola on the roof. Perrine slammed the door behind him and strained to fend off his attackers. The family, shivering in the water below, heard everything that happened. “For a few moments after they swarmed up the stairs after him, there was a horrid silence, only broken by the blows of their tomahawks upon the door, then a crash, one wild strike, a rifle shot and all was still,” his daughter Hester wrote later.

The Indians set fire to books in the family library to destroy the house, as Ann Perrine and the children sneaked away in the water to safety. Perrine’s son returned a few days later to search for his father’s body. He found only a thighbone, several ribs, and part of his skull. The fate of his seed chest is unknown.⁴

After the Perrine tragedy, no one suggested any other grandiose schemes to introduce foreign plants in America until Lathrop and Fairchild came
along more than fifty years later. By then, most of the world, including south Florida, was at peace.

* * *

In 1897 the two men joined the growing number of Americans who had begun to travel to enlighten and amuse themselves, not to trade goods or make money. After the end of the Civil War, commercial steamship lines had opened old trading routes to tourists, offering luxurious cabins and European-style cuisine to the idle wealthy. When affluent sightseers arrived in port, they were welcomed at stately, modern hotels that were well staffed and comfortable. Travelers often brought six or seven steamer trunks with them so they could wear their most fashionable clothes while they visited the local sights. The end of the nineteenth century was the golden age of world travel.

When Fairchild and Lathrop began the adventures that would change America’s eating habits, they looked like improbable companions. Lathrop was tall, slim, and always well dressed; in bearing he resembled the military men he admired. He carried a cane and wore a hat wherever he went. Fairchild, in contrast, was gawky and uncertain and rarely wore clothes appropriate to the occasion, whatever it was. Lathrop was demanding and critical; Fairchild was constantly frazzled.

In the beginning Lathrop, who had flashing dark blue eyes and expressive bushy eyebrows, called Fairchild “my investment,” with a little bit of a sneer. Fairchild, fully aware of the contrast, felt inadequate. “Somehow I could not do anything quite to suit him,” he admitted.5

Fairchild was so socially awkward that he agreed to one condition of working with Lathrop: he promised not to get married while he was exploring for plants.

* * *

Their expedition began immediately with a leisurely cruise to Singapore and Siam. They left the ship first in Bangkok, but they hadn’t had time to arrange what Lathrop considered proper lodgings for each of them there. Lathrop took the only room available and made Fairchild sleep on the floor of his hotel’s giant ballroom. The hard floor was uncomfortable, but the electric lights that illuminated the room were worse. Unable to sleep,
Fairchild unscrewed each light bulb to darken the room. He was astonished by what happened next.

“As I turned out the last light . . . I heard the rustling noise of something scuttling over the floor,” he recalled. “It was a noise which I had not heard before, and I screwed the bulb back again to behold hundreds of the largest, blackest cockroaches I ever saw—thick, ugly brutes—running for cover under the baseboard of the ballroom.” Fairchild cowered under mosquito netting for the rest of the night and slept lightly.

He witnessed another unexpected sight a few days later when he and Lathrop attended a young Thai couple’s wedding dinner. It was a special occasion because the Crown Prince of Siam also attended the feast. Fairchild found the food unfamiliar and the formal etiquette bizarre.

“During the thirteen-course dinner, every dish was strange to us except the rice,” he wrote later. “Each course was noiselessly placed on the table by a servant deferentially crawling on his knees. Not a person stood or walked erect while the prince and his guests were at the table. At the close of the long meal, the wives appeared and even those of royal birth all hitched themselves across the floor like a child who has not yet learned to creep.”

As witnesses to the wedding ceremony, Fairchild and Lathrop were obliged by local custom to trickle perfumed water down the bride and groom’s necks as the couple knelt together with their foreheads touching. “If the others poured as much water from the jeweled conch shell as I did,” he wrote later, “the poor bride and groom must have been well soaked.”

Because one of Lathrop’s many travel rules was never to stay long in any place, the pair had a dizzying itinerary. From Bangkok they returned to Singapore, then sailed to Ceylon and Australia. From Auckland, they took a seven-day voyage to Fiji where they met Thomas Hughes, an English sugar planter who spoke fluent Fijian. Hughes rented a boat and agreed to show them around the archipelago, which was then known as the Cannibal Islands. “We landed one morning on the island of one of the minor chiefs,” Fairchild wrote later. “He was a cannibal, of course, as they all were in those days.”

Hughes led them slowly to the chief’s home, a large, thatched building raised on rocks from the ground. “Once inside, we found ourselves on finely woven mats of pandan leaves covering a layer of ferns so deep that
it was difficult to walk,” Fairchild remembered. “The chief, a tall, rather handsome man, was attired for our reception in a white dress shirt, a loincloth into which his shirttails were loosely tucked, and a black four-in-hand tie around his neck. Waving a long flyswatter switch made of the midribs of a coconut frond, he advanced slowly toward us.” The chief also wore eyeglasses without lenses.

The sugar trader graciously introduced the men. “Mr. Hughes explained to him that the president of the United States and his private secretary had come to call,” Fairchild wrote. “The chief was highly honored and invited us to sit down with him on the floor.” The meeting was polite, and the conversation was mostly about food. The American visitors gave their host ice cubes from Hughes’s boat, objects he had never before seen or tasted. The chief told them about his many cannibal feasts, a ritual that had recently been banned. “Although we might know about this hard, wet stone which seemed so hot,” the chief told his guests, “we white men had never tasted delicious tidbits of barbecued human being.”

The chief complained that roast pig, the substitute he was forced to eat, was not as delicious as “long pig,” human meat. Fairchild, now blooming as a gourmet, learned that cannibals traditionally baked people with yams and taro roots in pits filled with banana leaves. He was also told that the thumb and palm are the tastiest bits of the body.

Later, on a nearby island, they were introduced to the king of all the Cannibal Islands, a man of higher rank, but that meeting was less dramatic. “Instead of a ceremonial reception such as we had received a few days before, the king was playing cards when we came in and evidently had been drinking heavily,” Fairchild wrote. “He merely turned, gave an unintelligible grunt or two, and went on with his game.”

The first Lathrop-Fairchild trip, a whirlwind tour that lasted about six months, gave Fairchild a taste of the most exotic ports in the Pacific. He identified a few foods that might grow in America, but he didn’t collect any seeds or cuttings because he had no place to send them. The agriculture department had no gardens or laboratories to test tropical plants. Lathrop thought he had a solution, a vague idea that he would establish an introduction garden for fruits and vegetables in Hawaii, so the pair stopped
there on the way home. They stayed long enough for Fairchild to see for the first time an avocado, which was then called an alligator pear, but they made no progress toward setting up a garden.

The travelers discussed Lathrop’s idea with a few wealthy landowners, but no one was interested in donating property for the experiment. By the summer of 1897, American plant exploration appeared to be nothing more than an ill-defined scheme cooked up by two mismatched vagabonds.

Fairchild was disappointed when he and Lathrop separated after they arrived in San Francisco in August 1897, writing afterwards, “I feared that I had failed him and that I should perhaps never see him again.”13

In ordinary times, Fairchild would probably have been correct. He would have resumed his mundane government work and, for a few years at least, regaled colleagues with stories of his globetrotting. These times were not ordinary, however. The United States had changed dramatically since David Fairchild had departed on the SS Fulda almost four years earlier.

When Republican William McKinley took office as president of the United States in March 1897, he needed to garner political support among farmers, many of whom had voted for his populist Democratic opponent, William Jennings Bryan. McKinley hoped to find a secretary of agriculture whom farmers would respect, one who would allay their fears that the new administration favored bankers over workers. McKinley quickly found the ideal man for the job.

His nominee was James Wilson, sixty-two, a former corn, hog, and cattle farmer who had been born in Scotland and moved to Tama County, Iowa, as a boy. There he was raised, he said later, on “thrift, psalms, and oatmeal.”14

Before McKinley nominated him as secretary, Wilson had run a farm in Iowa, directed the plant experiment station in Ames, and served three terms in Congress. Midwestern farmers and Washington lawmakers respected him from the first day he took office. McKinley’s appointment was so successful that Wilson held his job for sixteen years through three Republican administrations, making him the longest serving cabinet member in U.S. history.

McKinley and Wilson’s concern about agriculture wasn’t simply political or compassionate; they were also worried about a future food shortage. Statisticians had calculated that if American farmers didn’t start producing...