



DANDELION
SMALL-BATCH
CHOCOLATE

SOURCING REPORT

2019 - 2020



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THE PURPOSE OF THIS REPORT

Every chocolate bar we make begins on a farm somewhere between 20 degrees north and 20 degrees south of the Equator, thousands of miles from our factories in San Francisco and Tokyo. In this zone, more than 90 percent of the world's cocoa production takes place on small farms, where income is generally subject to both volatile world-market whims, and the vagaries of farming in a changing climate. Historically, it's been difficult for consumers to view the supply chain and the conditions surrounding cocoa production.

As a craft chocolate maker, we are part of a small but growing movement that seeks to make chocolate whose origins are distinct, clear, and sustainable. The following report functions as a platform to connect our producers and their practices with anyone interested in learning about where cocoa is sourced. If you buy our chocolate, you might be curious how much money reaches cocoa producers on the other end of the supply chain. If you're a producer, you may be interested in how other producers ferment, dry, or cultivate their cacao. We believe practicing transparency increases accountability, fairness, responsible stewardship, and best practices across the supply chain. We hope the information included here will serve that mission.

It's challenging to describe our relationships through metrics, and to capture cocoa-supply-chain economics solely with data. In this report, we've done our best to clarify our philosophy and the value chain within which we work. People often ask us how much money makes it to the farmers; and because we buy from cooperatives, individuals, single estates, and through import companies, determining that number is complex. The amount we pay per metric tonne of beans is called the "landed cost," which includes the price paid to the producer, estate, fermentary, or company from whom we purchase the beans, as well as fees for anyone hired to import, export, or transport beans to our local storage location. The landed

cost does not equal the "farm gate," which is the amount received by the person who grew the cacao. Right now, this accounting approach is the best we have, and we hope to find a more thorough way to break down costs in the future.

Our report details how each producer ferments, dries, and transports their product to us. It also shares how much cocoa we've purchased from each producer to date, and the amount we paid for that cocoa. In the end, everyone from the producers we work with to the customers who buy our chocolate is an integral part of the cocoa supply chain. Our aim here is to facilitate information flow between parties, and to empower us all to ask critical questions. Our industry is working to develop universal grading standards and a common lexicon to help chocolate makers and producers align practices. Clear communication will drive our industry to achieve common goals, including economic empowerment in developing communities, fair pay, and delivering the best chocolate we are able to produce.



OUR PHILOSOPHY

We strive to work directly with the producers who grow, ferment, and dry the cocoa we buy. We travel to origin as frequently as possible to learn about our producers' best practices, exchange feedback, and make sure that high standards of quality and sustainability are met. We pay a premium far above the fixed world-market price, and aim to strengthen our relationships year after year in order to maintain our collective commitment to sharing the best, most distinctive cocoa with you. We seek beans with good, consistent flavor, and partners with whom we are excited to work. We are happy to use intermediaries as long as they add value and are paid fairly for the work they do, and as long as their payment does not come out of producers' pockets. We believe that good business practices can help foster positive social, environmental, and economic change, and we are committed to increasing transparency in both our own process, and across the supply chain.

A NOTE FROM GREG

2019 through 2020 started off great! We were on track to buy more beans over the course of these two years than we ever had before. Then in March of 2020, as we were in the midst of our first-ever Craft Chocolate Experience — a festival to celebrate craft chocolate with our fellow chocolate makers, chefs, cocoa producers, and chocolate-loving consumers — we got word that San Francisco was sheltering in place for three weeks due to COVID. At the time, we naively thought we'd sit at home for a few weeks (eating chocolate and ramen — not always together), and then we'd go back to buying beans and making delicious chocolate. As you're likely aware, it didn't exactly go that way. We quickly had to shift the way we do business and the way we make chocolate. Our small but mighty team of amazing chocolate makers came in to the factory on their own, while the rest of us hunkered down at home and edited plans, developed new online Chocolate Experiences, and came up with new ways to get chocolate into the hands of our devoted guests and customers.

It's impossible to talk about anything in relation to 2020 without talking about the pandemic, but before we dive into that I think it's worth talking about 2019. 2019 was a really notable year for Dandelion Chocolate, as we finally opened our new, larger factory at 16th Street! This meant that we could start making bars on a tempering line (which means more consistency and less work), and we could introduce baking chips, which made our chocolate available for a whole new segment of use! We also opened our first permanent shop in the U.S. outside of California, at The Venetian in Las Vegas. From a sourcing perspective, 2019 was the setup that would allow us to start buying larger quantities of beans, which is good for Dandelion and also good for the producers with whom we work. Our goal has always been to be as consistent a partner as possible, and 2019 felt like we were finally going to get there. Then along came 2020.

As one of the owners of Dandelion Chocolate, I'm always concerned about our team and the viability of our business, but as the Bean Sourcerer, I'm equally concerned with our cocoa-producing partners. The pandemic brought an enormous amount of uncertainty to everyone, but the further away a business was from end customers, the more uncertainty the pandemic caused. At Dandelion, we didn't know how, if, or when we'd be able to make chocolate, or if anyone would buy it! People were hoarding toilet paper, not craft chocolate. Money was very tight, and our primary sales channel has always been our dedicated retail stores, and they were closed. All of that uncertainty in production and sales turned into uncertainty in buying cocoa. Dandelion always kept approximately one year's worth of beans on hand just in case something catastrophic happened. Something catastrophic did happen and while we had beans to make chocolate for a while, we wanted to be a good partner as well.

It's probably worth getting into the finances of how cocoa is produced. It might seem that growing a product means all of the capital goes into planting the trees and the rest is just money that comes in; sadly, it doesn't work that way. Cocoa farmers do need to spend money planting trees at the beginning, but for every harvest there are many costs they need to cover before they finally sell their beans. These include paying people to help harvest, paying for supplies, paying up front if they buy wet beans, etc. You might know all of this as "working capital." Every business has it, but for seasonal businesses in which there is a larger harvest and then a larger sale, the working capital needed is, well, larger.

At a chocolate factory you can buy your beans and sugar and about a month or so later have a chocolate bar to sell to pay for those ingredients, then get into a cycle, and the money you're making pays for what you need to buy, and for your space, and your team.





This cycle is hard for small farms to achieve as they are only selling beans a few times a year, but need to pay for things on the farm all the time. This is relevant to the pandemic because when business more or less stopped, many cocoa producers had already spent a lot of money to get ready for sales that were now in question. We decided that, even without much money at our disposal, the best thing we could do is talk to all the producers we had planned to buy from and see who had spent money on getting our deliveries ready. In some cases, the beans were on ships or had even reached the U.S. So the beans you see cited here that we bought in 2020 were the ones that were already in progress.

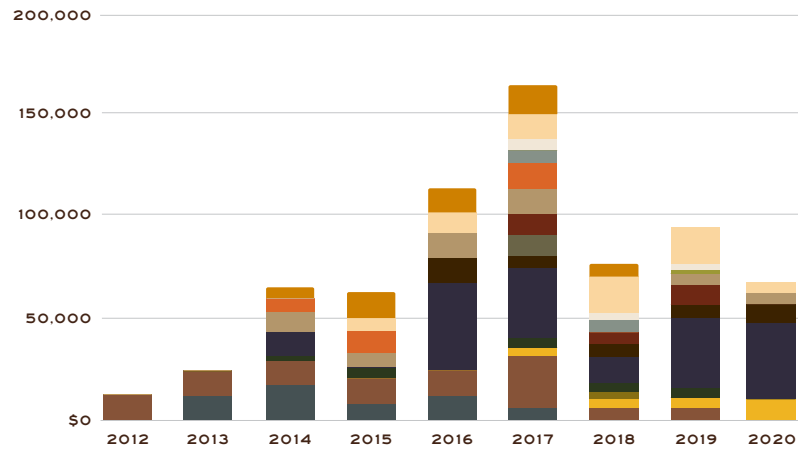
Now here's the interesting part. As 2020 started to come to a close, it turned out that people did want to buy chocolate! They mostly bought it online, but that just meant we needed to create a better online experience for our customers. The cocoa producers I spoke with were having the same challenge we were having: If they had a product to sell, people were buying it; the hard part was producing the product itself and getting it to customers. The majority of the producers we work with figured it out and made it through. I hope and believe that future sourcing reports will feature the same producers and show how much they've grown. 2020 was a challenging year in every way imaginable, but we are looking forward to the future and are happy we are still here to bring you this report.



ORIGIN & COUNTRY	REGION	SOURCE	YEARS PURCHASED	LAST VISIT	ROAST PROFILE BY
01 AMBANJA, MADAGASCAR	SAMBIRANO VALLEY	BEJOFO ESTATE	2012-2019	11.2015 GREG	NATE
02 ANAMALAI, INDIA	ANAMALAI	REGAL PLANTATIONS	2017-2020	10.2017 GREG	TREVOR (US) MAI (JAPAN)
03 CAHABÓN, GUATEMALA	ALTA VERAPAZ	ADIOESMAC	2014-2019	03.2016 GREG	ELMAN (US) YUTO (JAPAN)
04 CAMINO VERDE, ECUADOR	GUAYAS	CAMINO VERDE	2013-2020	08.2018 GREG, KAREN, RICHARD, MEGAN	ERIC (US) AIJI (JAPAN)
05 COSTA ESMERALDAS, ECUADOR	ATACAMES	COSTA ESMERALDAS	2016-2020	08.2018 GREG, KAREN, RICHARD, MEGAN	ERIC
06 HACIENDA AZUL, COSTA RICA	TURRIALBA	HACIENDA AZUL	2017-2019	06.2017 GREG	RYAN (JAPAN) MARIKO/OZAKI (JAPAN)
07 KOKOA KAMILI, TANZANIA	MOROGORO	KOKOA KAMILI	2014-2020	09.2018 GREG	ELISHA
08 VALE POTUMUJÚ, BRAZIL	BAHIA	PRIME CACAO	2019	05.2019 GREG	RENEE
09 WAMPU, HONDURAS	WAMPU	CACAO DIRECT	2017-2019	10.2018 GREG, CHIEKO	RICHARD (US) CHIEKO (JAPAN)
10 ZORZAL, DOMINICAN REPUBLIC	DUARTE	ZORZAL CACAO	2013-2020	04.2019 RON, CHIEKO	TREVOR (US) MARI (JAPAN)

ANNUAL QUANTITY PURCHASED

Now that we have been purchasing cocoa for a number of years, there is enough data to be interesting in aggregate. This graph shows all of the substantial purchases we've made over the years. All origins that we no longer use are lumped together, and every other origin is broken out per year.

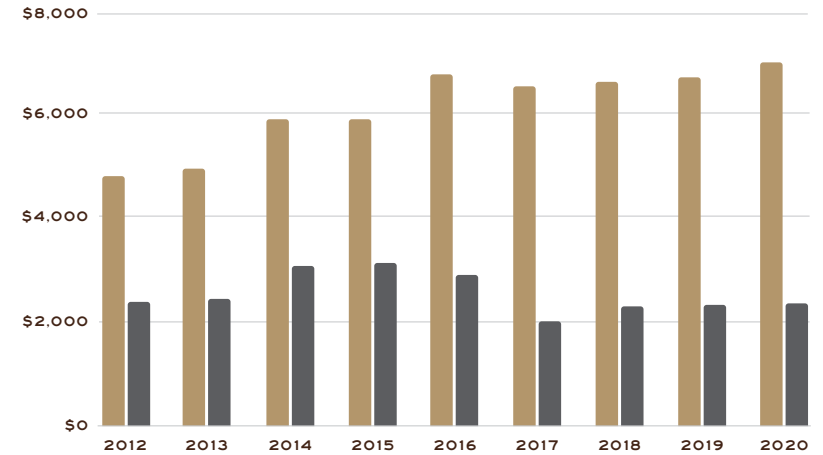


ORIGINS



AVERAGE PRICE PER TONNE

Price isn't everything, but we believe it is only fair to pay an appropriate amount for cocoa. Unless you work in cocoa, you might not follow market trends, but we thought it would be interesting to show the ups and downs of the average commodity price versus the average price we pay. Products get better, cost of living increases, and therefore the prices we pay should increase over time.



THE NUMBERS

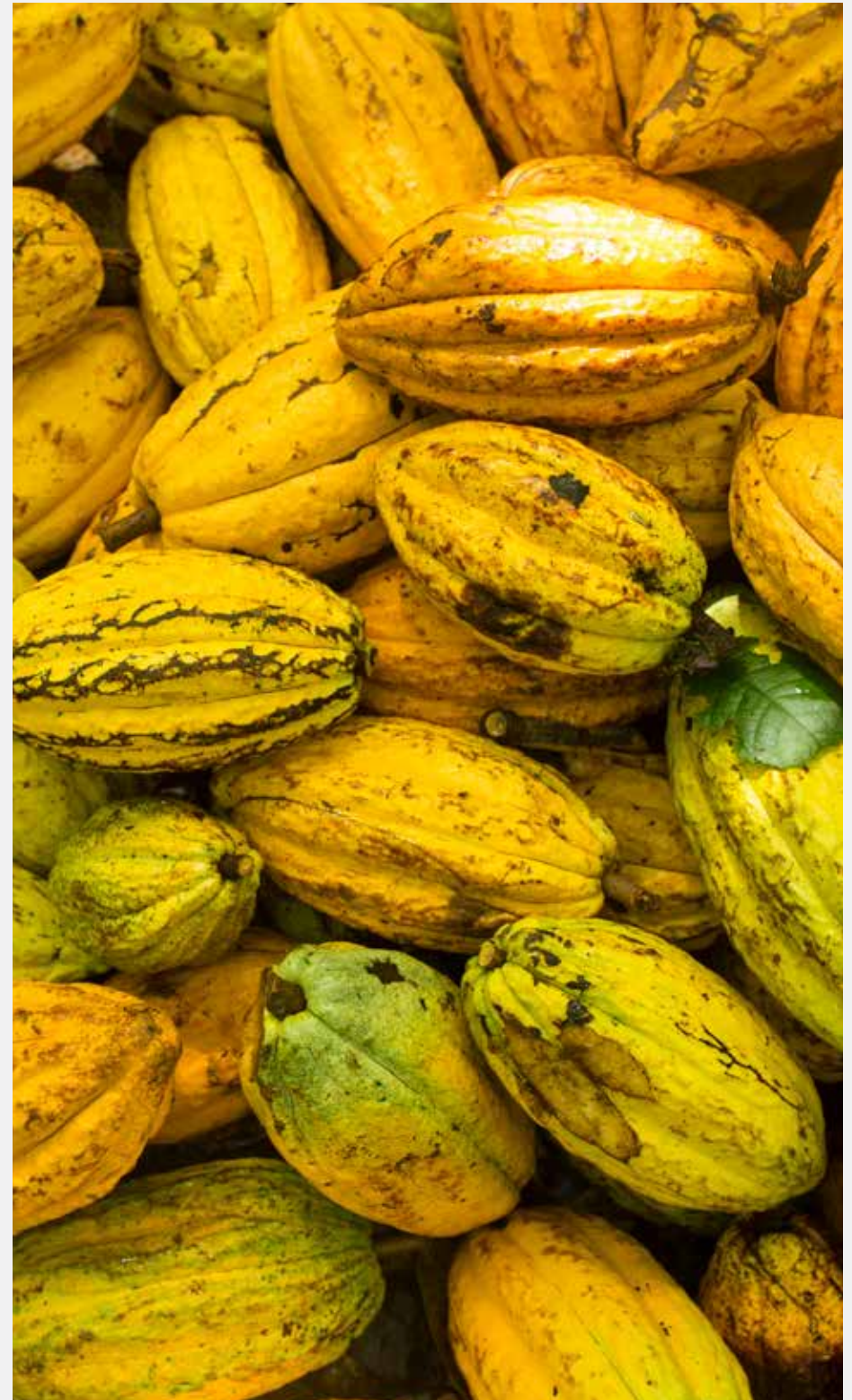
As the goal of this report is to provide as much information as possible, we believe the easiest way to do that is to list every shipment we receive. We hope this will give you insight into how the cocoa logistics of a company such as ours work.

2019				
DATE PURCHASED	ORIGIN	TOTAL WT (KG)	TOTAL	PRICE / MT
FEBRUARY 2019	AMBANJA, MADAGASCAR	6045	\$ 39,027	\$ 6,460
MARCH 2019	COSTA ESMERALDAS, ECUADOR	11004	\$ 74,520	\$ 6,750
MARCH 2019	ANAMALAI, INDIA	5040	\$ 35,280	\$ 7,000
MAY 2019	ZORZAL, DOMINICAN REPUBLIC	17990	\$ 103,622	\$ 5,760
JUNE 2019	CAHABÓN, GUATEMALA	4800	\$ 33,600	\$ 7,000
JUNE 2019	KOKOA KAMILI, TANZANIA	6350	\$ 38,789	\$ 6,430
AUGUST 2019	WAMPU, HONDURAS	3000	\$ 24,300	\$ 8,100
SEPTEMBER 2019	HACIENDA AZUL, COSTA RICA	9639	\$ 63,615	\$ 6,600
SEPTEMBER 2019	CAMINO VERDE, ECUADOR	6000	\$ 40,520	\$ 6,750
SEPTEMBER 2019	COSTA ESMERALDAS, ECUADOR	6120	\$ 50,062	\$ 8,180
OCTOBER 2019	CAMINO VERDE, ECUADOR	17940	\$ 121,095	\$ 6,750
DECEMBER 2019	VALE POTUMUJÚ, BRAZIL	1620	\$ 12,960	\$ 8,000
		95548	\$ 637,390	

2019 AVERAGE PRICE PER METRIC TON \$6,982

2020				
DATE PURCHASED	ORIGIN	TOTAL WT (KG)	TOTAL	PRICE / MT
JANUARY 2020	CAMINO VERDE, ECUADOR	12560	\$ 86,273	\$ 6,870
APRIL 2020	CAMINO VERDE, ECUADOR	24840	\$ 170,651	\$ 6,870
APRIL 2020	ANAMALAI, INDIA	9750	\$ 68,250	\$ 7,000
MAY 2020	KOKOA KAMILI, TANZANIA	6000	\$ 39,840	\$ 6,640
JUNE 2020	COSTA ESMERALDAS, ECUADOR	8980	\$ 73,424	\$ 8,180
SEPTEMBER 2020	ZORZAL, DOMINICAN REPUBLIC	4970	\$ 28,627	\$ 5,760
		54540	\$ 467,065	

2020 AVERAGE PRICE PER METRIC TON \$6,887



Fermentation

Drying

Logistics

AMBANJA, MADAGASCAR



4-TIERED BOXES



RAISED WOODEN BEDS & CEMENT PATIOS



AKESSON'S ORGANIC ESTATE GROWS, FERMENTS, & DRIES BEANS



EXPORT BY AKESSON'S ORGANIC ESTATE



IMPORT BY DANDELION CHOCOLATE

ANAMALAI, INDIA



5-TIERED BOXES



RAISED MESH BEDS & CEMENT PATIOS



REGAL PLANTATIONS GROWS, FERMENTS, & DRIES BEANS



EXPORT BY REGAL PLANTATIONS



IMPORT BY DANDELION CHOCOLATE

CAHABÓN, GUATEMALA



LINEAR BOXES



RAISED WOODEN BEDS WITH GREENHOUSE



ADIOESMAC (CO-OP) GROWS, FERMENTS, & DRIES BEANS



CACAO VERAPAZ BUYS & BLENDS BEANS



EXPORT BY CACAO VERAPAZ



IMPORT BY UNCOMMON CACAO

CAMINO VERDE, ECUADOR



STACKED BAGS



CEMENT PATIOS



SMALL-HOLDER FARMERS GROW BEANS



CAMINO VERDE FERMENTS & DRIES BEANS



EXPORT BY AGROARRIBA



IMPORT BY MERIDIAN CACAO

COSTA ESMERALDAS, ECUADOR



5-TIERED BOXES



RAISED MESH BEDS & CEMENT PATIOS WITH GREENHOUSE



COSTA ESMERALDAS GROWS, FERMENTS, & DRIES BEANS



EXPORT BY COSTA ESMERALDAS



IMPORT BY DANDELION CHOCOLATE

HACIENDA AZUL, COSTA RICA



5-TIERED BOXES



RAISED WOODEN BEDS WITH GREENHOUSE



HACIENDA AZUL GROWS, FERMENTS, & DRIES BEANS



EXPORT BY BUENA NOTA IMPORTS



IMPORT BY BUENA NOTA IMPORTS

KOKOA KAMILI, TANZANIA



3-TIERED BOXES



RAISED WOODEN BEDS WITH GREENHOUSE



SMALL-HOLDER FARMERS GROW BEANS



KOKOA KAMILI FERMENTS & DRIES BEANS



EXPORT BY KOKOA KAMILI



IMPORT BY MERIDIAN CACAO

VALE MOTUMUJÚ, BRAZIL



LINEAR BOXES



RAISED WOODEN BEDS WITH GREENHOUSE



PRIME CACAO GROWS, FERMENTS, & DRIES BEANS



EXPORT BY PRIME CACAO



IMPORT BY DANDELION CHOCOLATE

WAMPU, HONDURAS



LINEAR BOXES



RAISED MESH BEDS & CEMENT PATIOS WITH GREENHOUSE



SMALL-HOLDER FARMERS GROW BEANS



CACAO DIRECT FERMENTS & DRIES BEANS



EXPORT BY CACAO DIRECT



IMPORT BY DANDELION CHOCOLATE

ZORZAL, DOMINICAN REPUBLIC



4-TIERED BOXES



RAISED MESH BEDS WITH GREENHOUSE



ZORZAL CACAO & SMALL-HOLDER FARMERS GROW BEANS



ZORZAL CACAO FERMENTS & DRIES BEANS



EXPORT BY CACAO DEL BOSQUE



IMPORT BY DANDELION CHOCOLATE



AMBANJA, MADAGASCAR

PROFILE BY | NATE

FLAVOR NOTES | MANGO LASSI, CHOCOLATE MOUSSE

FERMENTATION STYLE | 4-TIER BOXES

DRYING STYLE | RAISED WOODEN BEDS, CEMENT PATIOS



AKESSON'S ORGANIC ESTATE
GROWS, FERMENTS, & DRIES BEANS

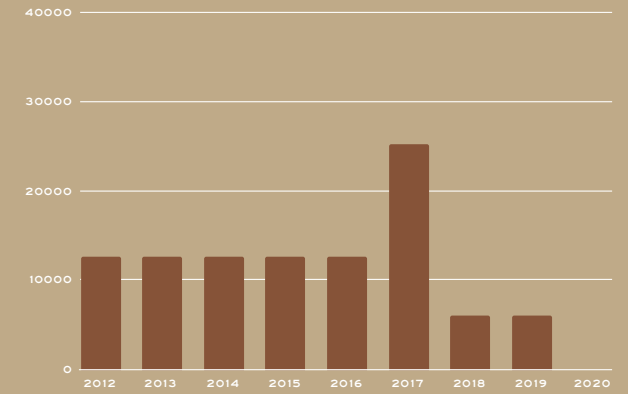


EXPORT BY
AKESSON'S ORGANIC ESTATE

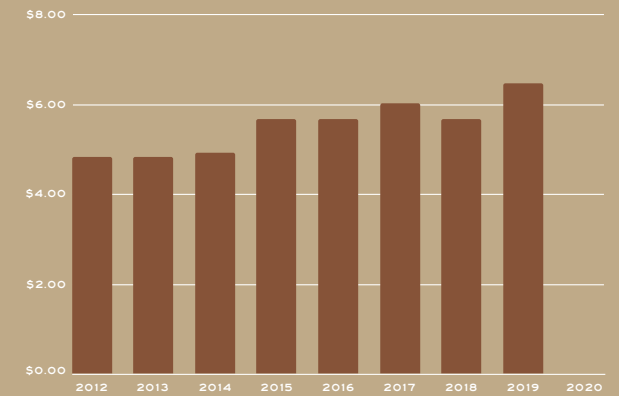


IMPORT BY
DANDELION CHOCOLATE

Quantity Purchased (in kg)



Average Price per kg



In 2012, Dandelion Chocolate purchased our first full container of beans — from Bertil Akesson’s Bejofo Estate, which has been growing cacao in Ambanja, Madagascar since 1920. We’ve bought from them consistently ever since, and for the first time in 2017, purchased two full containers (around 25 tonnes) of Bejofo Estate beans.

Akesson’s 600-hectare estate, where cacao trees up to 80 years old flourish, is the largest single estate with which we work. Bertil’s operation is smooth and consistent. Every morning during harvest season, farm workers cut down about 400 ripe pods each, crack them open, and move the juicy pulp-coated beans quickly into fermentation boxes, where the beans ferment for six days. Fermenting beans immediately after harvest is a crucial piece of quality control, and Bertil ensures that it happens within hours. Once fermented, the beans dry briefly in full sun on cement patios before being moved to elevated drying decks to finish drying slowly. While it’s hard to know for certain, we believe this two-part drying process is partially responsible for the beans’ flavor.

We are proud to work with Bertil both because we love his beans, and because we believe that he has paved the way for much of specialty cocoa’s development. The flavors in his beans change slightly every year, but always include bright fruit and punchy acidity. The bars we create from Bertil’s cocoa are among our customers’ favorites; they taste nothing like what most Americans think of as “chocolatey.” When Bertil started producing beans, most makers were seeking something that tasted like, well, chocolate. Bertil broke the mold and produced cocoa that was intriguing, fruity, and intensely different. Many new chocolate makers now use these beans because they invariably yield distinctive, attention-grabbing bars.

Once cocoa producers saw that there was a market for uniquely flavored cocoa, the floodgates opened and producers started creating new and complex flavors. Bertil was the first to take this risk. We look forward to continuing our relationship with Bertil, and making some of our most interesting chocolate from his beans. He has begun a variety of

projects in countries beyond Madagascar, and we are eager to see what the future holds for Bertil and his impact on the cocoa industry.







ANAMALAI, INDIA

PROFILE BY | TREVOR (US)/MAI (JAPAN)

FLAVOR NOTES | CARAMELIZED BANANA, CHOCOLATE CRÉMEUX

FERMENTATION STYLE | 5-TIER BOXES

DRYING STYLE | RAISED MESH BEDS, CEMENT PATIOS



REGAL PLANTATIONS GROWS, FERMENTS, & DRIES BEANS

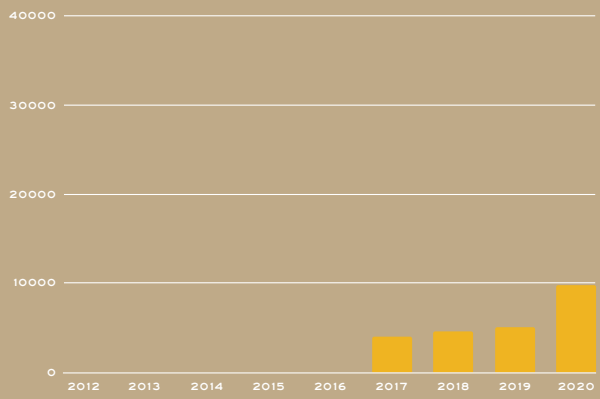


EXPORT BY REGAL PLANTATIONS

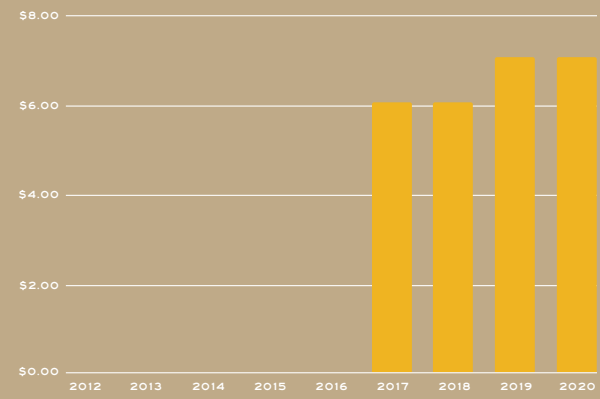


IMPORT BY DANDELION CHOCOLATE

Quantity Purchased (in kg)



Average Price per kg



In 2017, Dandelion Chocolate made our first bar with beans from Asia. The beans were grown in Tamil Nadu, one of the two southernmost states in India, an area known more for tigers than cacao.

This cocoa is produced by brothers-in-law Harish Manoj Kumar and Karthikeyan (Karthi) Palanisamy of Regal Plantations, just outside Anamalai in Tamil Nadu. Harish is originally from Pollachi, near Regal Plantations, and for many years his family has run multiple farms around Pollachi, focusing on cacao, coconut, and nutmeg. In 2014, Harish took over running the family farms, and partnered with Karthi to improve the quality and flavor of the cacao growing between 30-year-old coconut palms. The brothers-in-law employ around 100 people, 60 of whom are women, and the size and diversity of farms allow Harish and Karthi to experiment with various methods to improve agricultural quality.

The team has focused on creating a sustainable cultivation system on the farms, gradually reducing chemical use until phasing it out completely in 2017. Harish and Karthi subsequently began using the Korean Natural Farming System to help enrich the soil with indigenous microorganisms. It's a system of constant experimentation and adaptation, relying on understory and overstory crops, as well as on livestock to help manage weeds and fertilize trees. It's easy to see this system's success in the increasingly robust health of Regal Plantations' trees over the years; the difference is incredible.

Greg was introduced to Harish and Karthi in 2015 by Meridian Cacao's Gino Dalla Gasperina, whom he had met at Chocoa, a cocoa and chocolate festival in Amsterdam. Greg and Gino decided to stop by Regal Estates to see their operation "en route" to Tanzania. Greg was blown away by the high level of attention to detail on the farm, but noted that the fermentation process still needed improvements.

After the initial 2015 visit, Dandelion Chocolate and Meridian Cacao teamed up to support Dan O'Doherty, a fermentation expert with Cacao Services, to travel to Regal Plantations in June 2016 to help the team fine-tune their fermentation process. Based on feedback from Dan, Harish and Karthi decided to move their fermentation and drying facilities to a nearby area with better conditions; to build completely new structures; and to retrain their staff on fermentation and drying practices. Fortunately for all involved, the changes worked wonders. When Greg visited in 2017, improvement was clear. The new agricultural systems had increased the trees' productivity remarkably, and the updated fermentation process expressed itself in the beans' new and intense flavor.

Harish's and Karthi's hard work brought international acclaim when their beans won a Cacao of Excellence Award in 2017. Being the innovative team they are, they even used the nutmeg produced on their land in a 2019 fermentation experiment, resulting in some really tasty beans that we turned into our first-ever Nutmeg Ferment bar! We love using Regal Plantations' beans in both the U.S. and Japan, and look forward to seeing how their product evolves.





CAHABÓN, GUATEMALA

PROFILE BY | ELMAN (US)/YUTO (JAPAN) FLAVOR NOTES | CHOCOLATE PUDDING, AMARENA CHERRY, ESPRESSO

FERMENTATION STYLE | LINEAR TWO-BOX DRYING STYLE | RAISED MESH BEDS WITH GREENHOUSE



ADIOESMAC (CO-OP)
GROWS, FERMENTS,
& DRIES BEANS



CACAO VERAPAZ
BUYS & BLENDS BEANS

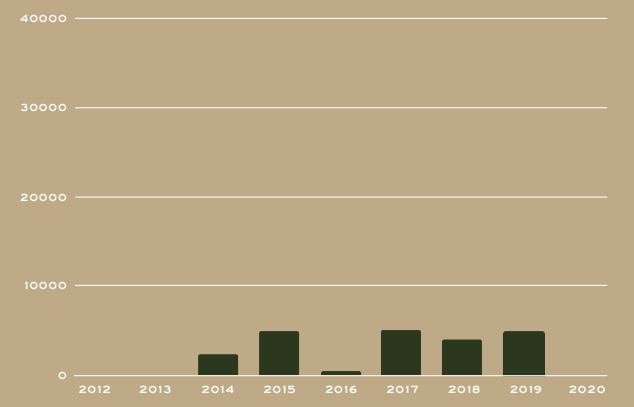


EXPORT BY
CACAO VERAPAZ

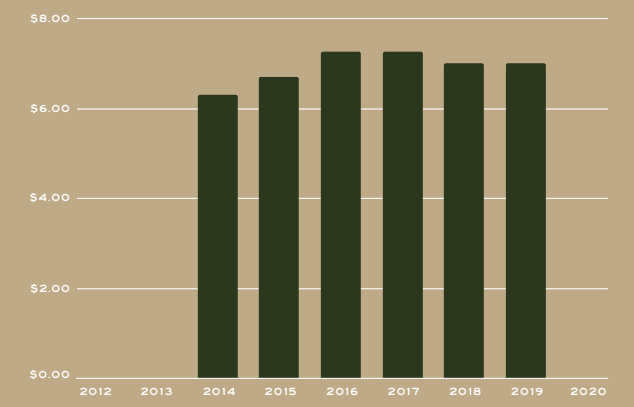


IMPORT BY
UNCOMMON CACAO

Quantity Purchased (in kg)



Average Price per kg



Since 2014, we have been purchasing beans from ADIOESMAC (the Asociación de Desarrollo Integral Ox' Eek Santa María Cahabón) through Cacao Verapaz S.A., a social enterprise and export group that works primarily with indigenous Maya farmers in the Alta Verapaz department of northern Guatemala. In the Cahabón region of Alta Verapaz, one of the poorest sections of the country, Cacao Verapaz offers technical support and processing-technique training to the farming families comprising ADIOESMAC, which allows the farmers to sell finished beans at a higher price than they could with their old practice of selling unfermented beans.

Cocoa is a promising source of income for the community. The reputation of cocoa from the area has continued to grow and production has steadily risen in recent years. 2017 saw the construction of a new fermentation and drying facility financed by the government's Rural Development Program of the North (PRODENORTE) and the International Fund for Agricultural Development. This significant investment in the Tzalamtun community of Cahabón is due to the region's recognized cocoa-producing potential.

Some believe that Guatemala is the birthplace of cacao, which fuels a desire for development in this sector. Cacao Verapaz's role in the country since 2013 (and with ADIOESMAC since 2014) has ensured more stable payments to producers, and connected them to international markets where their high-quality cocoa can garner higher prices. The additional income has provided capital resources for further development. Cacao Verapaz also offers support in the form of working capital so that ADIOESMAC can pay farmers on time for their wet cacao deliveries, and provide cacao sacks and GrainPro bags for storage to ensure that fermented, dried cocoa is not damaged.

Dandelion Chocolate has been buying beans from ADIOESMAC through Cacao Verapaz since 2014, and the commitment of the Association and Cacao Verapaz to high-quality cocoa is evident. Dandelion was

ADIOESMAC's first international market partner, and we feel proud to have played a key role in growing the cocoa industry in this historically important and underserved region.







CAMINO VERDE, ECUADOR

PROFILE BY | ERIC (US)/AIJI (JAPAN)

FLAVOR NOTES | FUDGE BROWNIES, CARAMEL, MILK

FERMENTATION STYLE | INOCULATED, STACKED BAGS

DRYING STYLE | CEMENT PATIOS



SMALL-HOLDER FARMERS
GROW BEANS



CAMINO VERDE FERMENTS
& DRIES BEANS

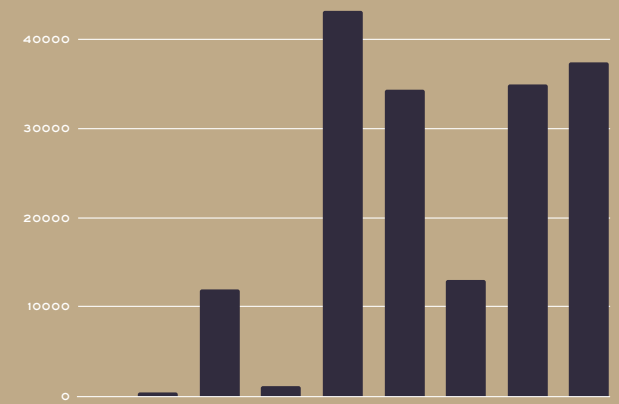


EXPORT BY
AGROARRIBA

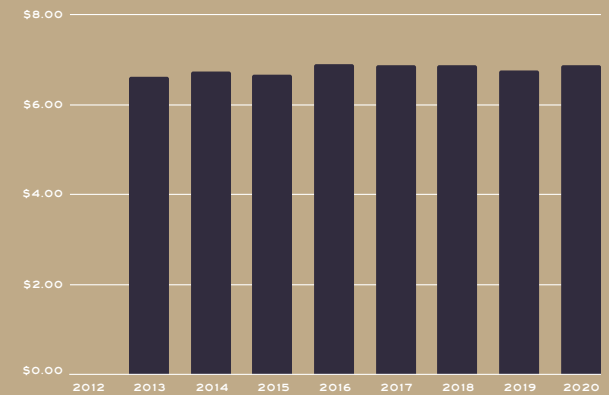


IMPORT BY
MERIDIAN CACAO

Quantity Purchased (in kg)



Average Price per kg



Vicente Norero, the owner and general manager of Camino Verde Cacao, is one of the most innovative cocoa producers we know. We love the flavor of his beans so much that not only do we make them into two chocolate bars, an 85% and a 100%, but we also turn them into 70% chocolate, which we use in nearly all of our drinks and many of our pastries at our cafés in the U.S.

Camino Verde's base of operations is in Duran (near Guayaquil), where Vicente ferments and dries beans, and runs a full chocolate factory where he co-manufactures chocolate for multiple makers. Making chocolate in his own factory means that Vicente has the capacity to develop specific flavor profiles for customers, tweaking his own process and getting instant, direct feedback about what various cocoas taste like as chocolate. He buys freshly harvested, unfermented beans from over 100 farmers and associations around Ecuador, searching out beans that best represent the uniqueness of cacao in Ecuador. Working successfully with beans from all over the country means constantly learning new things about fermentation. For instance, cacao grown at a high altitude may not ferment in the same way as cacao grown at sea level. Each set of beans from each part of Ecuador requires time and experimentation to learn how it is best fermented.

In addition to focusing on unique, high-quality cocoa, Camino Verde works with marginalized groups from Los Ríos, in central Ecuador, and Esmeraldas, in the north, to improve their crops — and, as a consequence, their livelihoods. Camino Verde has opened dedicated bean-collection points near distant farms, and built the infrastructure needed to ferment beans locally before shipping them to Duran.

We have worked with Vicente for many years and are excited to witness the growth of his operation. We are deeply impressed by his dedication to the pursuit of flavor, as well as by his efforts to boost farmers' incomes. Dandelion Chocolate has purchased more beans from Camino Verde than any other single producer, and we couldn't be happier with that decision.







COSTA ESMERALDAS, ECUADOR

PROFILE BY | ERIC

FLAVOR NOTES | MOLASSES, CHOCOLATE PUDDING, BLUEBERRY

FERMENTATION STYLE | 5-TIERED BOXES

DRYING STYLE | RAISED MESH BEDS CEMENT PATIO GREENHOUSE



COSTA ESMERALDAS GROWS, FERMENTS, & DRIES BEANS

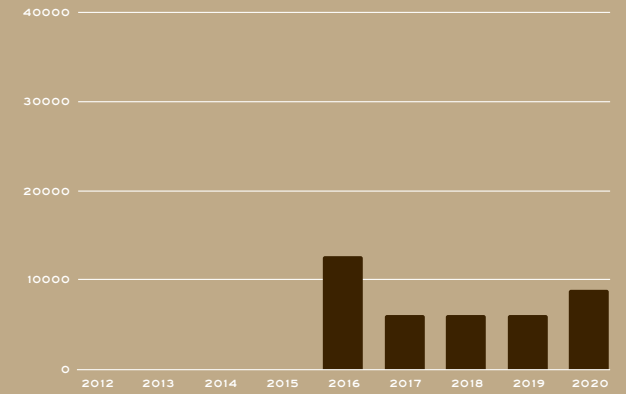


EXPORT BY COSTA ESMERALDAS

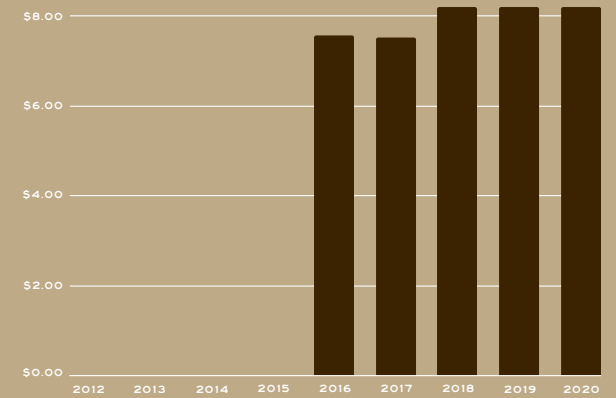


IMPORT BY DANDELION CHOCOLATE

Quantity Purchased (in kg)



Average Price per kg



Costa Esmeraldas' Freddy Salazar produces fascinating and unique cocoa that we make into one of our best-selling bars. Nearly 15 years ago, Freddy's father purchased two properties on the northeastern side of the beautiful Esmeraldas coast. The properties were covered by dry pastureland, a eucalyptus farm, and wild forest inaccessible by road — and were not ideal for growing cacao. Father and son set out to construct a farm and a cocoa-processing facility.

What began as a passion project for the Salazar family has evolved into a thriving cacao farm of over 340 hectares, 200 of which are used for growing cacao. While most of the trees, and the beans we buy, are Neo-Nacional, the farm also produces CCN-51 pods as a cash crop, selling to the local bulk-cocoa market. In addition, the farm produces bananas and citrus, and 50 hectares of land have been preserved as virgin forest, providing a thriving habitat for flora and fauna.

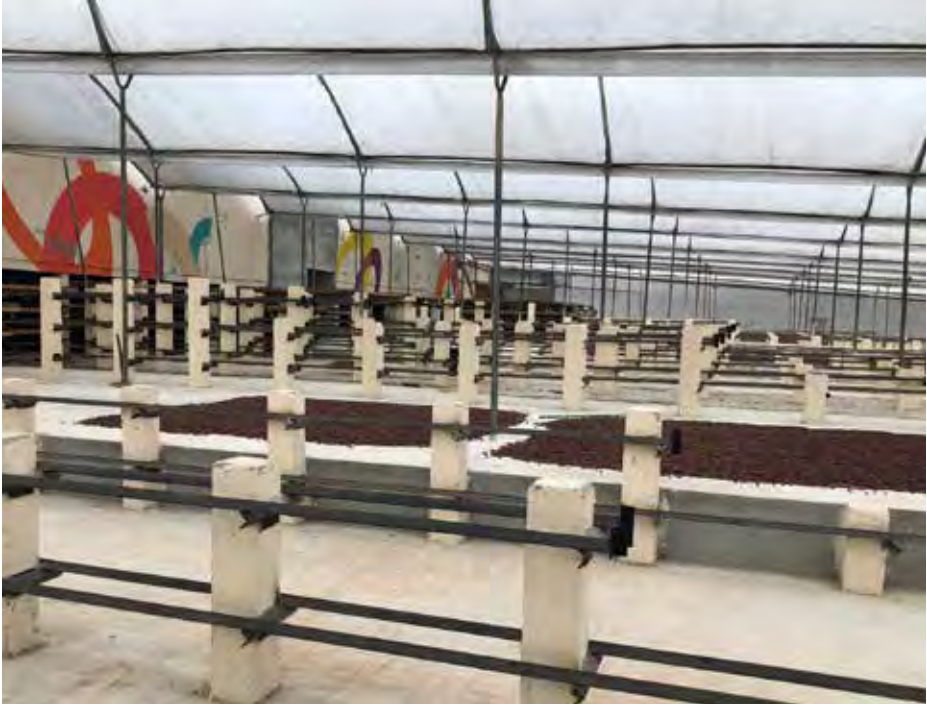
Freddy's Neo-Nacional trees, crossbred from the original Ecuadorian Nacional variety and other varieties to increase production and disease tolerance, require different growing conditions from CCN-51 hybrid trees. CCN-51 is a clone used throughout Ecuador for bulk cocoa, due to its hardiness, disease resistance, and ability to grow prolific numbers of pods. When the Salazars started their farm, they received cultivation advice based only on CCN-51 — tips such as not to use shade trees. This meant the family had to work hard to shift the farm from where it started to ensure that their Neo-Nacional trees thrived: via shade creation, careful disease management, and frequent pruning.

It has not been easy for the Salazars to adjust; at one point they considered selling their farm. However, Freddy has helped push the business toward experimentation, and he continually learns from others in the industry. At Costa Esmeraldas, Freddy and his team place high value on being good neighbors to nearby communities, and to flora, fauna, water, soil, workers, and everyone involved in or affected by the farm's operations. In 2017, they carefully expanded the farm based on analysis of both the cost-effectiveness of new plantings, and the environmental

impact of expansion; they selected cacao varieties they envision will cater to chocolate makers' future desires. They also completed a fermentation and drying facility designed by Dan O'Doherty, based on designs from the Fundación Hondureña de Investigación Agrícola (FHIA), the Honduran institute specializing in agriculture and cacao.

In 2019, the many investments paid off when Costa Esmeraldas earned a Cocoa of Excellence Award. We've worked with Freddy since 2016, and expect that under his leadership, Costa Esmeraldas' well-deserved reputation as a source of high-quality cocoa for global craft chocolate makers will continue to grow, as will his business.







HACIENDA AZUL, COSTA RICA

PROFILE BY | RYAN (US)/MARIKO & OZAKI (JAPAN) FLAVOR NOTES | CHOCOLATE ALMOND BISCOTTI, CARAMEL

FERMENTATION STYLE | 5-TIERED BOXES DRYING STYLE | RAISED MESH BEDS WITH GREENHOUSE



HACIENDA AZUL GROWS, FERMENTS, & DRIES BEANS

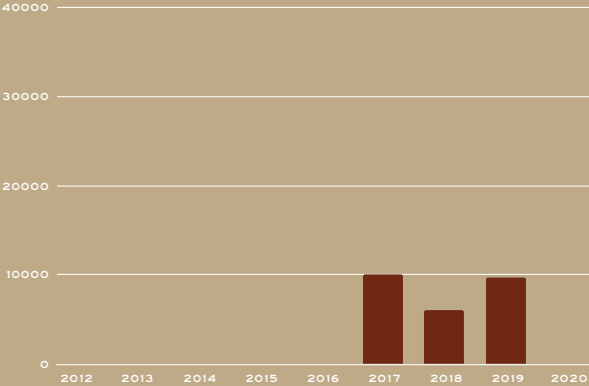


EXPORT BY BUENA NOTA IMPORTS

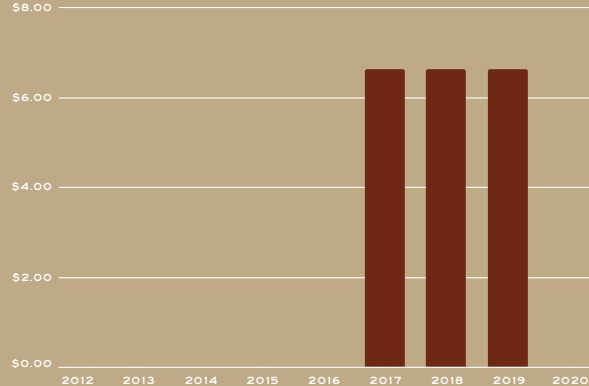


IMPORT BY BUENA NOTA IMPORTS

Quantity Purchased (in kg)



Average Price per kg



In 2017 we began working with Eric Sharvelle of Buena Nota Imports, and with Wilfred Zeuner, who runs Hacienda Azul, a single-estate cacao farm located near Turrialba, Costa Rica. Nearly half the estate's 87 hectares are planted with cacao sown over the last 10 years, and the most recent plantings thrive in the shade of Mexican cedar trees. The estate is a truly beautiful piece of land on which a river bisects gently sloping hills, making the property perfect for growing cacao.

Wilfred's estate embodies the application of 30 years of cacao research by CATIE (The Tropical Agricultural Research and Higher Education Center). Meticulously breeding cacao cultivars to achieve disease resistance and high, good-quality yields, CATIE put together a set of six cultivars (known as CATIE-R1, CATIE-R4, CATIE-R6, CC-187, ICS-95 T1, and PMCT-58) selected to increase Central American cacao quality and productivity, thanks to the trees' hardiness and ability to cross-pollinate effectively. In brief, these cultivars are clones produced by a variety of crossbreeding experiments. The resulting trees are not genetically modified (a.k.a. "GMO"), but selected and cultivated to strengthen specific characteristics. Wilfred chose to work with all six cultivars and has seen excellent results.

On the farm, Wilfred and his team's attention to detail extends to their processing setup. The cacao trees grow on sloped hills, so during harvest, pods are cut from the trees, then rolled to the bottom of each hill for collection by tractor. This approach improves efficiency and removes the labor of carrying heavy sacks of pods.

The system for cracking pods has also been upgraded, separated into a series of efficient steps. First, the pods are cracked on an angle iron embedded in a block of wood, and tossed onto a mesh bed. Next, someone at the mesh bed scoops the beans from each pod and collects them in buckets, from which they are poured into fermentation boxes. Wilfred then ferments the beans in a five-tiered fermentation setup, after which they are moved into a greenhouse-enclosed drying facility outfitted with mobile racks small enough for all of the beans to be turned by hand. By hand-turning

beans rather than raking them, workers can see and remove any imperfect beans, so only the best beans are bagged and sent to customers.

Every step of Hacienda Azul's process is performed with care and attention, similarly to how we make chocolate at Dandelion. Consistent, high-quality beans become consistent, high-quality chocolate. It is invigorating to work with people who share our commitment to crafting an outstanding product, and we hope you enjoy the results in the bars we make.





KOKOA KAMILI, TANZANIA

PROFILE BY | ELISHA (US)

FLAVOR NOTES | STRAWBERRY LEMONADE, CREAM, FUDGE

FERMENTATION STYLE | 3-TIERED BOXES

DRYING STYLE | RAISED WOODEN BEDS



SMALL-HOLDER FARMERS GROW BEANS



KOKOA KAMILI FERMENTS & DRIES BEANS

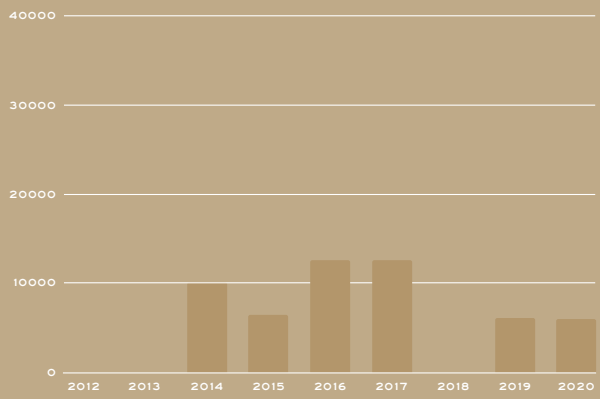


EXPORT BY KOKOA KAMILI

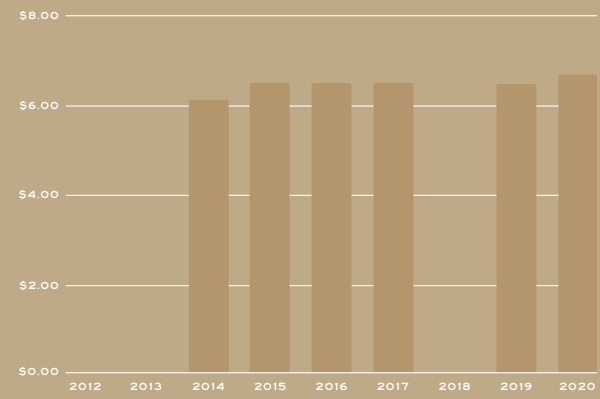


IMPORT BY MERIDIAN CACAO

Quantity Purchased (in kg)



Average Price per kg



Brian LoBue and Simran Bindra of Kokoa Kamili have built a successful cacao business in the remote Kilombero region of Tanzania, while learning from industry colleagues and seeking to improve conditions for everyone in the value chain. Kokoa Kamili works with over 4,000 farmers in Tanzania, buying wet beans, then fermenting and drying them in a centralized facility. By consistently controlling and enhancing quality in this way, they produce an outstanding cocoa bean, are able to garner a premium price, and are a large supplier of specialty cocoa to the global craft-chocolate market. Kokoa Kamili invests the same degree of care and thought into their cocoa that we aim to put into our chocolate, making them an ideal Dandelion partner.

We have worked with Kokoa Kamili since 2014, and are inspired by their growth — from shipping their first container, to supplying chocolate makers around the world. To meet the needs of their cocoa operation more effectively, they are planning a new facility that includes a permanent drying space (as opposed to mobile drying beds), a nursery to grow seedlings for the farmers with whom they work, and a demonstration farm for farmer education. Kokoa Kamili's production continues to expand with new buyers every year. Despite this production growth, quality remains high and the price consistent. Kokoa Kamili's bean quality is evidenced by the number of small-scale chocolate makers sourcing from them year after year. The team's continuous learning has also paid off in other ways, earning them a coveted Cocoa of Excellence award at the 2017 International Cocoa Awards in Paris.

Because we love the Kokoa Kamili team so much, we bring guests to visit them! In 2017, Kokoa Kamili began annually hosting a group from Dandelion Chocolate, composed of our customers, along with the occasional chocolate maker. These trips help people from around the world to learn more about Kokoa Kamili, and allow their team to meet end customers of their product. We find it's a great way to close the loop on a complex supply chain, while learning more about each other along the way. We look forward to hosting these trips again soon!







VALE POTUMUJÚ, BRAZIL

PROFILE BY | RENEE (US)

FLAVOR NOTES | ORANGE BLOSSOM HONEY, CHOCOLATE ICE CREAM, NUTS

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED WOODEN BEDS WITH GREENHOUSE



PRIME CACAO GROWS, FERMENTS, & DRIES BEANS

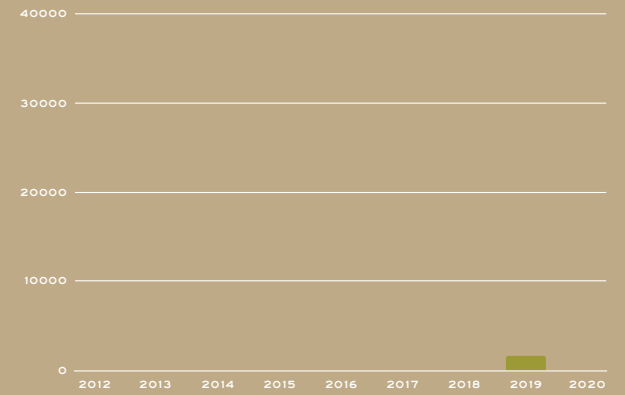


EXPORT BY PRIME CACAO

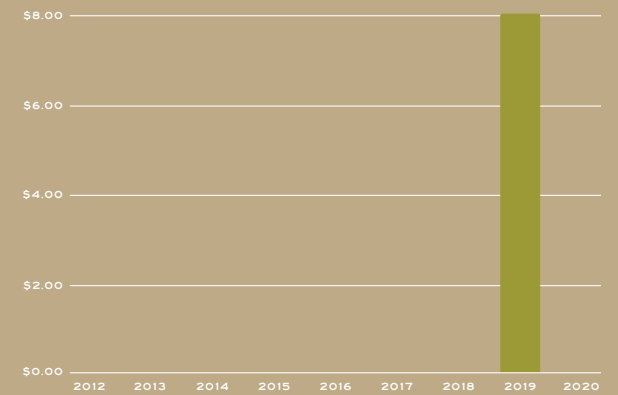


IMPORT BY DANDELION CHOCOLATE

Quantity Purchased (in kg)



Average Price per kg





We spent years searching for the right cocoa partners in Brazil, and in 2016 finally met Juliana and Tuta Aquino from Bahia, the largest cocoa-producing state in Brazil. Prior to crop devastation by a cacao disease called Witches' Broom in the late 1980's, Brazil produced a large portion of the world's cocoa. Over the last two decades, the industry recovered and a new specialty-cocoa market emerged as Brazilians began to enjoy craft chocolate. Now Tuta and Juliana are among a number of local "tree-to-bar" producers who grow cacao, harvest and ferment beans, then make their own chocolate. The tight tree-to-bar-production feedback cycle rapidly improves cocoa quality.

Tuta and Juliana have a deep love for cocoa. They grew up on cacao farms in Bahia, then left to pursue successful careers in the music industry — Juliana is an accomplished bossa nova singer and Tuta is a music editor and engineer. Despite their successes in music, they returned to Bahia several years ago to cultivate and process cacao on Juliana's family farm. They renamed the farm Vale Potumujú ("vale" is valley and "potumujú" is a type of tree in Brazil), and refurbished operations to achieve excellent bean fermentation, with an eye toward sustainability.

Tuta and Juliana follow a Brazilian system called "Cabruca," used to preserve existing rainforests wherever possible while growing cacao underneath. They also hired Dan O'Doherty (who has worked with Costa Esmeraldas, Maya Mountain, Regal Plantations, and many others) to help them develop a world-class fermentation and drying protocol and facility. The results speak for themselves. In her kitchen, Juliana began making chocolate from the farm's beans, which led to the creation of Baianí, Vale Potumujú's own tree-to-bar chocolate brand. Vale Potumujú doesn't produce very much cocoa, but great relationships and great beans are worth the wait, and after approximately three years, Tuta informed us in 2019 that they finally had enough beans that they could sell us a small quantity. The beans' quality and flavor come from decades of passion, years of growth, and months of hard work, and we are thrilled to continue our relationship with the Aquinos.





WAMPU, HONDURAS

PROFILE BY | RICHARD (US)/CHIEKO (JAPAN) FLAVOR NOTES | HOT FUDGE, HAZELNUT, BROWN BUTTER

FERMENTATION STYLE | LINEAR TWO-BOX DRYING STYLE | GREENHOUSE DESIGN WITH WOODEN DECKS



SMALL-HOLDER FARMERS GROW BEANS



CACAO DIRECT FERMENTS & DRIES BEANS

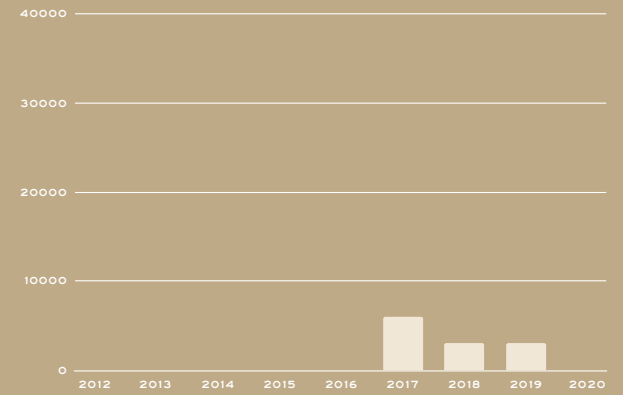


EXPORT BY CACAO DIRECT

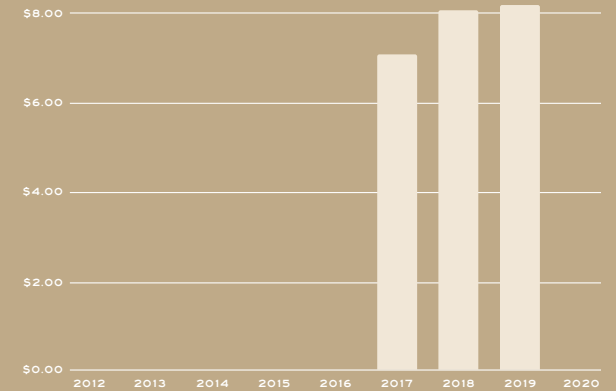


IMPORT BY DANDELION CHOCOLATE

Quantity Purchased (in kg)



Average Price per kg





UNESCO recognizes 686 biosphere reserves in 122 countries, including 130 sites in 21 countries in Latin America and the Caribbean. Just across the Patuca River from the village of Wampusirpi (also known as Wampu), the Río Plátano Biosphere Reserve in Gracias a Dios, Honduras measures 832,032 hectares, and is part of the largest remaining Latin American tropical rainforest outside the Amazon. It harbors 130 species of mammals, as well as 36 percent of reptile species, 57 percent of bird species, and 70 percent of the fish species found in Honduras. Ethnic Garifuna, Miskito, Tawahka, and Pech groups live and share in the Reserve; the region is home to approximately 2,000 families who depend upon natural resources for their livelihoods, and for whom local economic opportunities are critically limited.

Today, the Reserve faces constant pressure from the threat of illegal logging and subsequent conversion of land to cattle-ranching pasture. Cacao can help. Historical and archeological evidence indicates that cacao has been cultivated in this part of Honduras for hundreds, maybe thousands, of years. In order to produce cacao suitable for making outstanding chocolate, producers here must overcome substantial challenges. The region is so hot, humid, and remote that not only fermentation and drying, but even transportation, are extremely difficult. To reach Wampusirpi, travelers must either take a tiny, private, four-person plane or drive to Palestina, in Olancho, and spend two days on the Patuca River in a pipante (a kind of hollowed-out log canoe). In this remote place, the team at Cacao Direct have been working since 2014 with approximately 200 Miskito families, providing them with technical assistance, training, information, and tools at cost for planting and maintaining their cacao trees.

The cacao is cultivated organically by individual farmers and families, then fermented and dried at a centralized facility Cacao Direct built in 2015 to ensure consistent quality. Their efforts have paid off: Cacao Direct won the Honduras Cocoa of Excellence Competition in 2016 and 2017, enabling them to use the award's prize money to provide a new roof and windows for the local school. Cacao Direct's success producing award-winning cocoa in Wampusirpi is no small feat. Other

international organizations have repeatedly tried to accomplish the same over the years, but none lasted long enough to make a difference in the community.



ZORZAL, DOMINICAN REPUBLIC

PROFILE BY | TREVOR & JANELLE (US)/MARI (JAPAN) FLAVOR NOTES | CARAMEL, CHOCOLATE SYRUP, CHERRY

FERMENTATION STYLE | 4-TIERED BOXED

DRYING STYLE | RAISED MESH BEDS, WITH GREENHOUSE



ZORZAL CACAO & SMALL-HOLDER FARMERS GROW BEANS



ZORZAL CACAO FERMENTS & DRIES BEANS



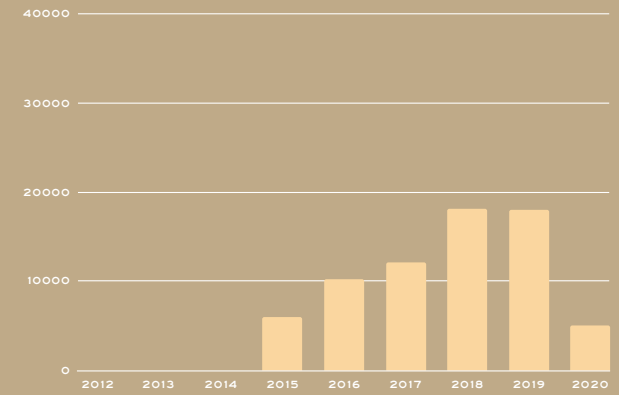
EXPORT BY CACAO DEL BOSQUE



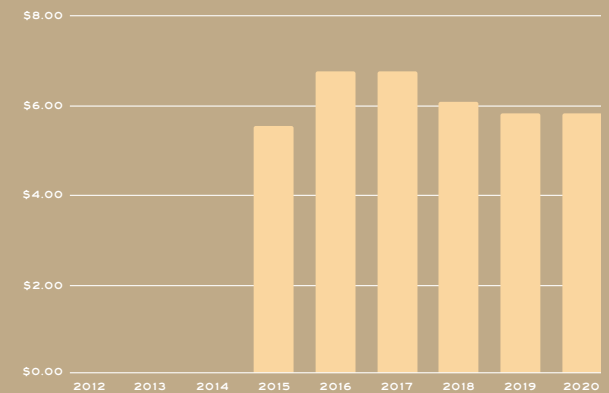
IMPORT BY DANDELION CHOCOLATE



Quantity Purchased (in kg)



Average Price per kg





Dr. Charles (Chuck) Kerchner co-founded Reserva Zorzal and Zorzal Cacao in 2012, hoping to prove that a for-profit business could be a viable, economically sustainable driver of environmental conservation. Chuck and his co-founders (Jamie Phillips, Jesus Moreno, Jaimie Moreno, Angelica Moreno, and Sesar Rodriguez) bought a relatively undeveloped 412-hectare piece of land in the mountains of Duarte Province, Dominican Republic. They divided it into Reserva Zorzal (a bird sanctuary) and Zorzal Estate (a farm) to protect critical habitat while growing high-quality cacao. Zorzal Cacao processes and sells Estate-grown cocoa under the name “Zorzal Estate,” and the company also buys and ferments freshly harvested beans from neighboring farms, selling them under the title “Zorzal Comunitario.”

Zorzal Cacao has grown substantially since Chuck first walked into Dandelion’s Valencia Street factory and café in 2013. In Zorzal Cacao’s early days, Chuck used local fermentary Öko Caribe’s infrastructure to ferment Zorzal Estate-grown beans. Then in 2016, Zorzal Cacao built their first post-harvest facility, which allowed them to ferment Zorzal Estate cacao and cacao from surrounding farms on site. In 2018, with an enormous amount of experimentation under their belt, Zorzal Cacao moved their post-harvest processing facilities to a new piece of land better situated for temperature and moisture control during bean drying, and where improved road access makes transport easier. The “fermentarium” is located in Los Arroyos, approximately 10 minutes from San Francisco de Macorís, the bustling epicenter of Dominican Republic’s cocoa production. Also in 2018, Zorzal and Dandelion co-developed an app to capture Zorzal’s bean-collection, fermentation, and drying data. This information has strengthened their understanding of post-harvest processing variables’ impact on flavor.

While Zorzal Cacao’s efforts are focused primarily on land preservation and cocoa production, they also address reforestation of the Dominican Republic. Reforestation is implemented through a carbon-offset program, which pays farmers annually to set aside a portion of their land to grow local trees. To fund the program, chocolate makers who buy

from Zorzal Cacao are able to purchase \$200 worth of carbon credits for each tonne of cocoa. To date, a total of 80 hectares of trees have been planted through the carbon incentive program, including a portion of land within Reserva Zorzal itself. In total, Zorzal Cacao and partnering organizations have protected 1,238 hectares of threatened rainforest in the northeast Dominican Republic since 2012.

Unlike many of the places we source beans, the Dominican Republic has a thriving national cocoa industry, and Chuck has been able to support staff retention through continual education. Dandelion runs annual customer trips to Zorzal; on these trips, we visit several different cocoa producers, explore Reserva Zorzal, and spend time with the Zorzal team. The best part of working with people around the world is getting to meet in person, learn from each other, and gain new appreciation and understanding of our shared world.



