

## GIVING YOU THE BEST THAT MOTHER NATURE HAS TO OFFER

### **APPALACHES NATURE:**

# THE NEW STATE-OF-THE-ART SITE OF A FOOD COMPANY SPECIALISED IN NATURE

"Our group has always been committed to food safety and protecting the ecosystem. These two subjects have become major areas of concern for consumers and are some of the greatest challenges we face for the future."

#### **100 YEARS OF EXPERTISE IN NATURAL SWEETENERS**

Yves Michaud founded Famille Michaud Apiculteurs in 1920. The company grew to become the European market leader in honey, and it expanded its business to include other natural liquid sweeteners: agave syrup and maple syrup.

#### **100 YEARS OF INNOVATION**

The company created **the Maple Joe® brand** in 2000, and today the Maple Joe® range is **sold in fifty-five countries**. The Sunny Via® brand created in 2010 has become Europe's number-one brand in the agave syrup market. Over the years, the group became specialists in natural liquid sweeteners.

The founder of Famille Michaud Apiculteurs was driven by **innovation**, and this value has made the company a major player worldwide). This is how we emerged as the world leader in natural liquid sweeteners (honey, agave syrup, maple syrup).

#### We put innovation to work for the quality of our products.

The company invests heavily in their purity, origin and taste. We recently acquired **NMR** (Nuclear Magnetic Resonance) technology, which has revolutionised the way natural sweeteners are analysed.



### AN INDEPENDENT FAMILY BUSINESS

## DESIGNED TO MEET THE DEMAND OF A FAST-GROWING GLOBAL MARKET



**Vincent MICHAUD**CEO
of Appalaches Nature



Marie MICHAUD Vice-President of Appalaches Nature



**Jean-Philippe LANOIX** *Industrial General Manager* 



**Serge DUBOIS**Head of Maple Growing
Development



François DUBOIS
Appalaches Nature
Operational Plant
Manager



**Nicolas TASSEEL**Head of Information Flow
and Systems



Magali CUVILLIER
Supply Chain Manager



**Patricia BEAUNE** Quality Manager



**Nicolas PASQUET** Head of International Development



James HARTWICK USA Sales Manager



Jessica BOUTIN Canada Sales Manager

## A GROUP ORIENTED TOWARDS COMPLETE TRACEABILITY FROM START TO FINISH



Our group relies on the highest-skilled professionals and an information system built on SAP technology to address the strictest supply chain constraints. Our Thetford Mines site is able to deliver products worldwide in record time, with perfect traceability. Our group operates in process mode (an exact way to treat each flow and each event).

Like all of our subsidiaries around the world, Appalaches Nature benefits from our complete control of logistics, both upstream and downstream, which ensures impeccable traceability and absolute food safety.

# OUR CHALLENGE FOR TOMORROW: HELP OUR CONSUMERS ADOPT A HEALTHY DIET!

The natural sweeteners we sell are the only alternative for reducing the sugar addiction of younger generations. Even when they initially occur in nature, sugar and saccharose are highly processed and refined.

Our brains can't resist them, and they stimulate reward centres and addictive behaviour.

Our company aims to provide a solution in the fight against obesity for consumers and governments all over the world. We recommend taking action starting in early childhood by promoting healthy habits and prioritising 100 % pure, natural sweeteners, which do not cause addiction and can thereby reduce sugar consumption.



"It has been scientifically proven that by age seven, children have consumed as much sugar as their grandfathers of the last century did in their entire lives! We have to fight that by offering a healthy alternative to saccharose sugar."

Vincent Michaud CEO of Appalaches
Nature

100% PURE & NATURAL SWEETENERS

### TAKING ACTION FOR NATURE

## A SITE BUILT WITH THE ENVIRONMENT IN MIND

In order to achieve the smallest ecological footprint possible, our new production plant was designed to the highest standards of sustainability and energy efficiency.

In this respect, we are currently in the process of obtaining the LEED<sup>TM</sup> (Leadership in Energy and Environmental Design) certification Canada V4 for New Constructions (NC).

Similar to the HQE (Haute Qualité Environnementale) certification, the LEED certification takes into account several environmental performance indicators: reduction of energy consumption, drinking water savings in operations, adoption of practices to promote indoor air quality, supply of responsible materials, reduction of greenhouse gases, effective waste management and implementation of innovation strategies.

## REDUCING OUR CARBON FOOTPRINT

We made the decision to set up the processing plant in the middle of the production area to minimise travel for our staff and maple-growing partners. We believe it's possible to reconcile local expertise with the best international talent. Our positioning lets us select the best 100 % pure maple syrups and gives us a steady, high-volume supply all year round.

## PUTTING TECHNOLOGY TO WORK FOR THE ENVIRONMENT

We have installed a building supervision software that manages the building's flows and energies (heating, electricity, ventilation, water). For example, the ventilation automatically adjusts to save air. The incoming cold air is then preheated with the outgoing warm air. In addition, our industrial water consumption is extremely low and is kept to the absolute minimum. We also control all of our LED lighting.

#### **USING BIOMASS, A RENEWABLE ENERGY**

Renewable heat production combines two priorities in the development of our site: energy optimisation and environmental performance. Biomass is a great way to achieve this for two reasons: our region has a wealth of resources, and new technologies have been developed. This strategic choice gives us production cost visibility, lets us use high-performance energy technologies, and allows us to take advantage of a local resource (wood energy) in a circular economy context. As a result, our Thetford site has access to high environmental performance with CO² emissions that are ten times lower than natural gas (Base Carbone®). On top of that, we sell our biomass to our partner maple growers to encourage the professionals of Quebec to rise to the challenge of environmental protection with us!





Serge DUBOIS

Head of Maple Growing

Development

## LOCATED IN A UNIQUE AREA

"Our expertise is the result of a history and passion for maple growing that has been passed down from father to son for three generations. We run our business from Thetford Mines, in the Chaudière-Appalaches maple-growing region."

QUÉBEC PRODUCES 72 %

OF ALL THE MAPLE SYRUP
IN THE WORLD.





## **NOT ALL THE MAPLE TREES**ARE CREATED EQUAL

In fact, three species are used to produce maple syrup: red maple, silver maple, and sugar maple. Sugar maples provide the most sought-after flavor and aromas. Sugar maples are primarily present in mountainous regions since they thrive in cool, dry soil. That's why we set up our operations directly in the Appalachian Mountains, which are home to Quebec's richest concentration of sugar maples.



#### **SUGARING SEASON**

Maple trees require a temperature shock in late winter to release their sap, the natural ingredient that maple syrup is made of. In the Quebec forests, Chaudière-Appalaches is the best region for maple syrup's production. The temperature ranges, amount of sunshine and soil quality are ideal in Eastern Canada where we produce our maple syrup with patience, passion, and respect.

## APPALACHES NATURE,

## PARTNERING WITH LOCAL MAPLE GROWERS

Serge Dubois, who co-founded Biodélices with his cousin François, is deeply involved in the maple growing industry and is also the vice-president and a member of the board for the Filière biologique du Québec.





## RENOWNED EXPERTISE IN THE MAPLE-GROWING INDUSTRY

Serge is passionate about his job. He has been giving conferences for schoolchildren since 2014, and has been recognised several times for his entrepreneurial activism in maple growing. His distinctions include Personality of the Year at the 2012 Thetford Zenith Gala and Medal of the Order of Agricultural Merit in 2017.

At Appalaches Nature, his role is to develop and secure a supply network for premium-quality raw material. He is also responsible for building lasting relationships and a sense of synergy with the maple growers by understanding their specific needs, professional challenges, and lifestyle. He is also in charge of helping and supporting the producers at each stage in the maple syrup production process.

He has a keen interest in innovation and truly cares about constantly improving the quality of the raw material harvested through ongoing improvement of production techniques and working methods.





François DUBOIS

## **AN EXTRAORDINARY INDUSTRIAL SITE**

"Our development strategy had to be ambitious. We invested 21 million US dollars to build the most modern, most highly automated, safest site for the products."

#### A NEW, ONE-OF-A-KIND, **HIGH-PERFORMANCE BUILDING**

Our new industrial processing plant is located in Thetford Mines, right where the best-quality maple syrups are produced. The site takes forty hectares and is devoted to developing maple syrup production to meet rapidly growing worldwide demand, without straying from authentic

#### **SCALE**

100,000

EXPANDABLE SQUARE FEET ON A

40-HECTARE PLOT



## 30% of canada's SYRUP PRODUCTION

#### 3 BOTTLING LINES INCLUDING ONE FULLY AUTOMATED LINE

**OVER 200.000** 

#### **OVER 36 MILLION** POUNDS OF MAPLE

SYRUP/YEAR

#### **EXTRAORDINARY PRODUCTIVITY**

Our production capacity is unprecedented. We have three bottling lines, The bottling and packaging line equipment is video-monitored to ensure perfect quality for each and every product.

This is how we keep the risks associated with human handling or production line stops to a minimum to obtain fully optimized costs.

### **INNOVATING**

## FOR BETTER QUALITY

At each stage in production, our innovation team uses new processes and new techniques to guarantee that all of our products are of the highest quality.

## MAXIMUM SAFETY FOR EQUIPMENT AND PEOPLE

We use new technologies and in particular Artificial Intelligence (AI) to guarantee a perfectly safe production line:

- supervision of the line by an automaton;
- computer management of flows and parameters;
- blowing of ionized air to aseptically clean the bottles and eliminate the presence of any foreign body;
- optical control of the bottle ejection system so as to detect anomalies (closing, filling level);
- double labelling station to avoid stops.

In order to preserve the health and safety of our employees, we have invested in high-performance equipment (depalletizer, automatic crater, etc.) that facilitates handling and prevents employees from having to carry heavy loads or make repetitive movements.



Automated sterilisation system



Blowing of ionized air

#### **STERILISATION**

Many companies still sterilise bottles by hand, but our team has developed an allnew automated turning system to sterilise our syrups as quickly and safely as possible.

#### **COOLING**

We developed a technique to instantly cool the syrup on the assembly line after filling and sterilisation. The process perfectly controls flavor and color and prevents changes from occurring in storage. It "fixes" the syrup to ensure it retains all its properties over time.



28-head dispenser > Rate of 160 bottles/minute

## **OUR LABORATORY:**

### HIGHLY ADVANCED INSPECTION

Perfect quality in each product is an absolute necessity for leading brands. Food safety is extremely important and is the biggest challenge for the future. Our laboratory has always been at the cutting edge in this field, and we have innovated by investing heavily in new facilities and new technologies.



#### **NMR TECHNOLOGY**

#### **BENEFITS OF NMR TECHNOLOGY**

In 2016, our laboratory acquired Nuclear Magnetic Resonance identification technology. NMR is the equivalent of MRI in the medical sector. It is used to establish the profile of each honey or syrup and check its authenticity, origin, and freshness. NMR is currently the most reliable technology to guarantee a 100% pure and natural honey or syrup.

#### MASS SPECTROMETRY

We also invested in new equipment to analyse contaminants. **This technology detects all trace contaminants at once.** Acting like a scanner for food products, it guarantees the safety of our honeys and syrups. It is a very precise, reliable, predictive technique. New dangers that have not yet been reported can be anticipated.

In addition, our laboratory is accredited according to the NF EN ISO/IEC 17025 standard (COFRAC Accreditation Testing no. 1-5527, accreditation scope available at www.cofrac.fr). This accreditation requires impartiality and, as a result, the complete contractual independence of our laboratory. The strict international standard it adheres to is proof of the laboratory's scientific and technical expertise.



**Guillaume PALU CASTEROT** Engineer in charge of sourcing packaging materials abroad

## OUR COMPANY'S DNA: INNOVATION

"As a packaging engineer, I have been involved in several innovative developments with my team. We replaced the valves in all our plastic squeeze bottles with floating valves. That makes us the only company in the world to offer a full range of fully recyclable squeeze bottles."

#### INNOVATIVE, CONVENIENT PRODUCTS FOR EVERYDAY USE

Every day we take all possible steps to improve our packaging: weight reduction, recyclable packaging material, sustainability and protection of the environment, because we are passionate about protecting our planet. Our aim is to provide consumers with a new experience in the consumption of maple syrup while preserving our ecology and protecting our planet. Innovation is crucial, as we believe that convenient packaging encourages our consumers to replace refined sugar with natural sweeteners.

#### **SUSTAINABILITY**

We are currently studying the possibility of integrating RPET in all our squeeze bottles. This is recycled PET (PolyEthylene Terephthalate) from the food industry.

### ZERO NON-RECYCLABLE PACKAGING MATERIAL

We mainly use glass bottles whose recyclability does not have to be proven and polypropylene caps, which are also recyclable.

#### **WEIGHT REDUCTION**

We do not use unnecessary packaging material! At Famille Michaud Apiculteurs, you will not find any cases, clusters or sleeves... only the container, the closing cap and an outer package made of cardboard to protect the glass.

We are the only ones to offer a flexible PET bottle for maple syrup with a valve cap that stands out for its practicality of use and cleanliness in the dosage. We are also the first to offer a range of completely transparent jugs that really showcase the content and place maple syrup in the foreground on the shelves. Our Bags in Boxes are designed with a tap to allow consumers to regulate the flow of maple syrup to suit their needs.

#### A TIMELINE OF OUR MOST MEMORABLE INNOVATIONS

1992 1999 <u>2018</u> <u>2019</u>



Invention of the first bi-oriented PET squeeze bottle with drip-free cap



Invention of the first plastic squeeze bottle with silicone valve (packaging Oscar)



Launch of the Hot-fill PET Maple Joe® squeeze bottle



**Tritan** Maple Joe® jug

## PRODUCTS THAT ARE EVER MORE APPEALING TO CONSUMERS



Our mission: provide a solution for every consumer expectation in terms of maple syrup and natural liquid sweeteners, worldwide, by developing profitability for our wholesale and retail clients.

Unique, fun

product demonstrations

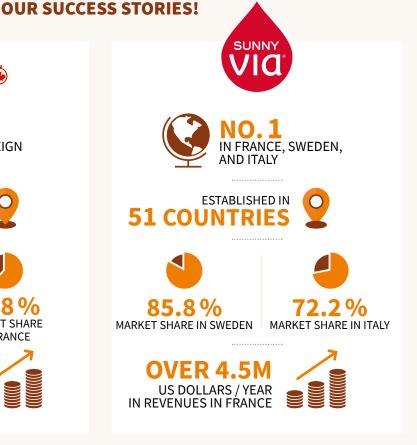
in sales outlets



**We actively raise consumer awareness** about the value of natural liquid sweeteners by showing how they are used and demonstrating the convenience of our products.

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Our site also produces other maple-derived products – spread, sugar, jelly – as well as our famous Sunny Via agave syrup.







## CREATION OF APPALACHES VERMONT, THE USA SALES SUBSIDIARY TO ENSURE:

- $oldsymbol{1}_{-}$  Best **quality and safety**
- 2 Shorter lead times
- 3 Reduced delivery costs
- Respect for the environment (shorter transportation routes, which reduces carbon emissions)
- 5 + Support for the American economy (employment and taxes);
- Local customer service with a specific team providing quality service through native representatives.

#### François and Serge Dubois, Appalaches Nature's General Managers in Canada.

A 100% family-run business resulting from a partnership between the Michaud and Dubois families



Sons and grandsons of maple growers



appalachesnature.com







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