



# ANNUAL REPORT

SEPTEMBER 2018 - JUNE 2019

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**JA British Columbia**

A Member of JA Canada



**apiculture** (āpəˌkəlCHər)

noun

The practice of keeping bees as well as the manufacturing of honey and beeswax.

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# from the executive

## JABC's Company Program shaped us to be more skillful members of our community

Apiculture is the second cohort of JABC's STEM-focused Company After-School program located in Kamloops, BC. Our team of four grade 8 to 11 students created a simple product using complex science, technology, engineering and math to tackle an urgent environmental problem.

Apiculture's hexagonal coasters feature bees and plants native to our area that we learned how to design and laser cut at our local Makerspace collective. The coasters are finished with a locally sourced beeswax and wrapped in a seed paper containing local pollinating flowers. Our goal is to help educate our customers about the importance of protecting pollinator habitats and to recognize - and plant! - pollinating flowers while providing them a purchase they can feel good about.

Kamloops is an official 'Bee City' however few people know the importance of pollinators in food security. A staggering 80% of our food supply relies on the bee pollination but pesticides and climate change are diminishing wild bee populations.

The coasters sell at two retail stores in Kamloops and our team is working to fulfill hundreds of custom ordered coasters. Each set of four coasters retails for \$12 with \$1 from every package sold donated to the Thompson Shuswap Master Gardeners, a local non-profit who provide advice on environmentally responsible gardening practices at clinics held at garden centers, farmer's markets, fall fairs, and garden tours.

We have incorporated the United Nations' 17 Sustainable Development Goals into every aspect of our business to do our share to confront the issues impacting our world.





As students operating a business, we faced a unique set of challenges. Juggling academic deadlines and extra-curricular activities, and learning what it really takes to operate a business. The pressure of looming deadlines and on-the-job learning were not the only obstacles in our way. Despite being teenagers, we faced the same challenges as adult entrepreneurs. The steep learning curve and time pressures were difficult to manage, but our team pulled together to face these challenges head-on and it shaped us to be more skillful members of our community.

In the 2019/20 JABC Company Program cohort, we envision building on the current momentum of Apiculture by creating an app. We plan to further engage our customers in our mission to protect pollinator habitats. The competition-based app with game-like features can educate while also entertaining, protecting pollinators habitats and more.

Finally, I would like to acknowledge our mentors Kara Wright, Angela Hapke and Hope Mikal for volunteering their time to mentor us throughout this program. We would not have done it without their guidance and effort to make our business a success.

*Sofia Sirianni*

Sofia Sirianni  
Vice-President of Marketing

# apiculture (āpəˌkəlCHər)

**"More than a coaster. Save your table, save the bees."**

We're a local coaster production company invested in educating the public about the plight of bees from a community-focused perspective. Inspired by the City of Kamloops becoming a designated 'Bee City,' we have created a set of four hexagonal birch wood coasters that feature local pollinating plants and bees, sealed with locally-sourced beeswax.

Apiculture is the product of a JABC STEM-focused Company Program giving students hands-on experience in STEM (Science, Technology, Engineering, Math), entrepreneurship and leadership. With community and mentor support, we created our own student startup in Kamloops, British Columbia.

## Mission

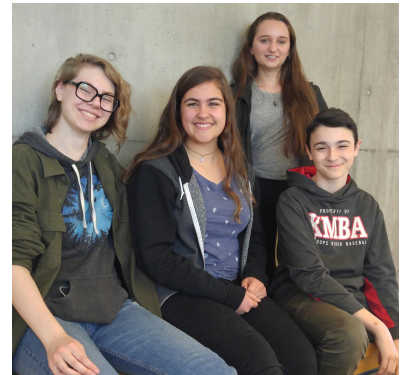
The purpose of our coasters, made out of locally sourced wood and beeswax, is to protect your table while also

providing education about native pollinators and our reliance on bees for food production.

Kamloops is a designated 'Bee City,' however few people are aware the importance of pollinators in producing food or how they can make a difference.

Our product features local bees and native plants that we designed and laser cut onto the coasters. We finish it off with a locally-sourced beeswax and include package it with homemade seed paper.

Through our business, recognition of importance of local pollinators and protection of their habitats has increased. With the seed paper as a simple way to take action on this urgent problem, we know this is a positive step toward the action needed to make a difference. To take it even further, plans for a new and innovative app are being developed to have the education portion of our product more accessible, engaging and impactful.



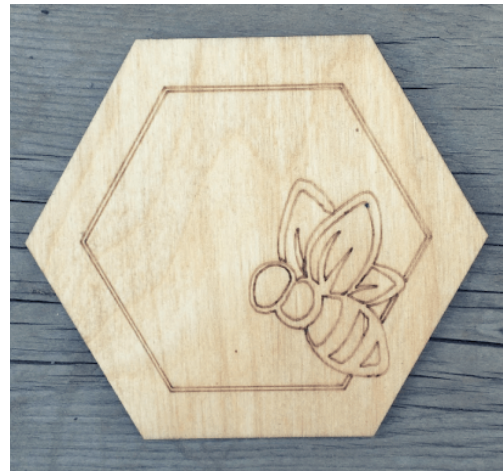
# our coasters



## HONEYCOMB

FAVUS MELLIS

Our honeycomb coaster shows off what honey bees are known for - honey! Bees create honey and honeycomb to feed and host their larva until they become bees. To make 1 pound of honey, bees must visit 2 million flowers.



## NATIVE POLLINATORS

CLEPTOPARASITIC CUCKOO BEE

Our bee coaster displays the most important pollinator for flowers. Worker bees work for the Queen to bring pollen to the nest. In one day, a single honey bee can pollinate over 5,000 flowers.



## LOCAL POLLINATING FLOWERS

BEE BALM (LAMIACEAE)

Our local pollinating flowers coaster features the local, bee balm flower that's native in our Kamloops area. Flowers use their unique scent and colour to attract bees in order for them to be pollinated.



## GLOBAL ISSUES

FOOD SECURITY

This design depicts the importance of bees to our world. Without these pollinators, we would lose 80% of our global food source. Secure access to food can produce wide ranging positive impacts including increased global stability.

# goals & milestones

**Goals** - Apiculture set the following production, sales and environmental impact goals:

## 1

Design, produce and package **50 sets** of coasters using locally sourced materials featuring native pollinating flowers, bees and bee habitats.

## 2

**Submit** our business pitch to the Community Futures **Junior Dragons' Den competition**, with a goal of being selected as a finalist at the live competition on April 4, 2019.

## 3

**Donate a \$1 from each sale** to a charitable cause dedicated to protecting pollinator habitats through education targeted at teens just like us.

## 4

**Design a website** to market our products, share our environmental impact goals, educate our customers and raise awareness about pollinators in Kamloops.

## 5

Secure **two (2) business to business sales contracts** with Kamloops retailers by May 13, 2019.

**Milestones** - Apiculture was able to meet and exceed all of our production, sales and environmental impact goals.



Design, produce and package **396 sets** of coasters using locally sourced baltic birch and beeswax featuring four (4) original designs of native pollinating flowers, bees and bee habitats.



Apiculture were **finalists in the Community Futures Junior Dragons' Den competition**. We pitched to a live audience of over 300 people and placed a very close second.



Apiculture is proud to **donate \$396** to the **Thompson Shuswap Master Gardeners** charitable cause dedicated to protecting pollinator habitats through education targeted at teens just like us.



**www.apiculturekamloops.com** features our story, our coasters and our environmental call to action with simple steps to protect pollinator habitats.



As of May 2019, Apiculture has **signed contracts with two (2) retail partners - Far + Wide, and Mustache & Go** - to sell Apiculture coasters.



### Additional Milestone Reached

To meet market demand, we had to quickly pivot to fulfill a large amount of corporate custom orders. Our custom order option includes three Apiculture bee designs and a fourth coaster custom logo coaster. Custom orders include the following customers:

- Royal Lepage - 100 sets
- JABC EFS@TRU Conference - 40 sets
- CFDC of CIFN - 100 sets
- Concert Development - 180 sets



“

I am so glad I joined this program. As a young business owner I've been able to connect deeper into the community with local retailers, politicians and leaders.

”

Sofia Sirianni, Vice-President, Marketing



“

This program taught me more about teamwork, entrepreneurship, and responsibility than anything else could've, and gave me some of the best experiences working within my community.

”

Tyson McDaniel, Vice-President Corporate  
Social Responsibility & Human Resources





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apiculturekamloops.com  
apiculturekamloops@gmail.com

# corporate social responsibility

Our commitment to corporate social responsibility is aligned with the United Nations' 17 Goals for Sustainable Development.

As a socially responsible company, Apiculture strives to create as a positive impact on the environment. We take special care in reducing packaging, using recycled materials whenever possible, sourcing locally, educating our customers about this domestic and global problem, and encourage them to save their table, and save the bees.

Our commitment to corporate social responsibility is aligned with the United Nations' 17 Goals for Sustainable Development. These goals aim to confront the biggest issues affecting our world today. We have touched on the following 7 goals in particular in hopes of doing our part to make the world a better place .

Goal 2: End hunger, achieve food security and promote sustainable agriculture

Goal 4: Ensure inclusive and quality education for all and promote lifelong learning

Goal 5: Achieve gender equality and empower all women and girls

Goal 9: Build resilient infrastructure, promote sustainable industrialization & foster innovation

Goal 12: Ensure sustainable consumption and production patterns

Goal 13: Take urgent action to combat climate change and its impacts

Goal 17: Revitalize the global partnership for sustainable development

Access to quality, nutritious food is fundamental to human existence. Scientists agree that the biggest threats to agricultural sustainability and food security both domestically and globally are:

- drought
- poverty
- military conflict
- chemical pollution
- population growth
- **impacts on pollinators**
- soil erosion
- climate change
- natural resource management

## Impacts on Pollinators

The loss of honey bees and pollinators due to human influence is becoming a rapidly increasing concern.





Honey bees and other pollinators are facing unprecedented challenges that pose serious threats to the sustainability of agriculture (where 80% of our food supply comes from), as well as the indigenous ecosystems that depend on them. Habitat destruction – destruction of areas populated with a diversity of indigenous wild flowers for forage - is one of these major issues.

Apiculture coaster encourage customers to take action to protect pollinators in the following simple and accessible ways:

- 1) Buy Apiculture coasters!** Not only is it a conversation starter, \$1 from every set is donated to the Thompson Shuswap Master Gardeners.
- 2) Create new pollinator habitats** by planting bee loving flowers like, daisies, sunflowers, and lavender! Or plant herbs, such as sage, oregano, and dill.
- 3) Don't use pesticides & only mow where necessary.**

Providing habitat for pollinators is a cost effective solution for businesses, communities and individual property owners. One hundred years ago, lawns, graveyards and rifle ranges were covered with wildflowers. Today, at significant cost in labour, fuel and equipment maintenance, these spaces look like golf greens. For pollinators, this is the epitome of a green desert.

Simple management changes in our - literally - our own backyards could be of substantial benefit to bees and other wild pollinators. Apiculture strives to educate the public, minimize our production waste, and help protect the diminishing bee population.

Tyson McDaniel  
Vice-President of Corporate Social Responsibility & Human Resources



# environmental impact

Apiculture's unique selling position is our impact through education.

The impact that bees make on humanity's everyday lives is much bigger than you may think. The problem is that bees provide so much for us, and there is not enough happening to keep them alive, and protect their habitats. The flowchart on the next page helps explain how exactly we plan to help solve this problem.

Our coasters feature local bees and plants to help educate the population of Kamloops about the importance of protecting pollinator habitats while also being aesthetically pleasing.

### Why are bees important?

80% of our food supply rely on bee pollination but pesticides and climate change are diminishing the population but through our coaster we can work together to change that.

### Charity Donation

\$1 from every coaster sold will be donated to the Thompson Shuswap Master Gardeners. This program provides advice on environmentally responsible gardening practices at clinics which are held at garden centers, farmer's markets, fall fairs, and during garden tours.

Apiculture's charitable donations support the UN's Sustainable Development **Goal 4 to ensure inclusive and quality education for all and promote lifelong learning.**

### Community Focus

As part of the #builtinkamloops initiative we are firmly entrenched in the local community. All design, manufacturing, and donations will be kept within our local community.

Apiculture's environmental impact plan supports the UN's Sustainable Development **Goal 2 to end hunger, achieve food security and improved nutrition and promote sustainable agriculture** as well as **Goal 12 to ensure sustainable consumption and production pattern.**





We created the coasters themselves at Kamloops Makerspace, a local volunteer driven community workspace collective. We source the beeswax finish from a local Farmers Market.

We have created partnerships with Kamloops Innovation Centre, the Kamloops Food Policy Council, JABC, and Makerspace. In addition, our products are sold at local small businesses.

As education is a key component of our initiative, we are working closely with many community groups and councils to spread awareness of the plight of bees.

Donations will be forwarded to the Shuswap Master Gardeners, whose goal is to educate the community on environmentally responsible gardening practices.



### Production

It took us many attempts to perfect our wood coasters. We spent many hours creating the flower and pollinator designs on our coasters and many more sanding and packaging them. We made sure all of the materials we used were recyclable in the city of Kamloops. We massively reduced waste by locally sourcing all of our materials, and doing things like cutting our coasters out in one big block instead of with space between them, so when we are done with our sheet of wood there is very little left.

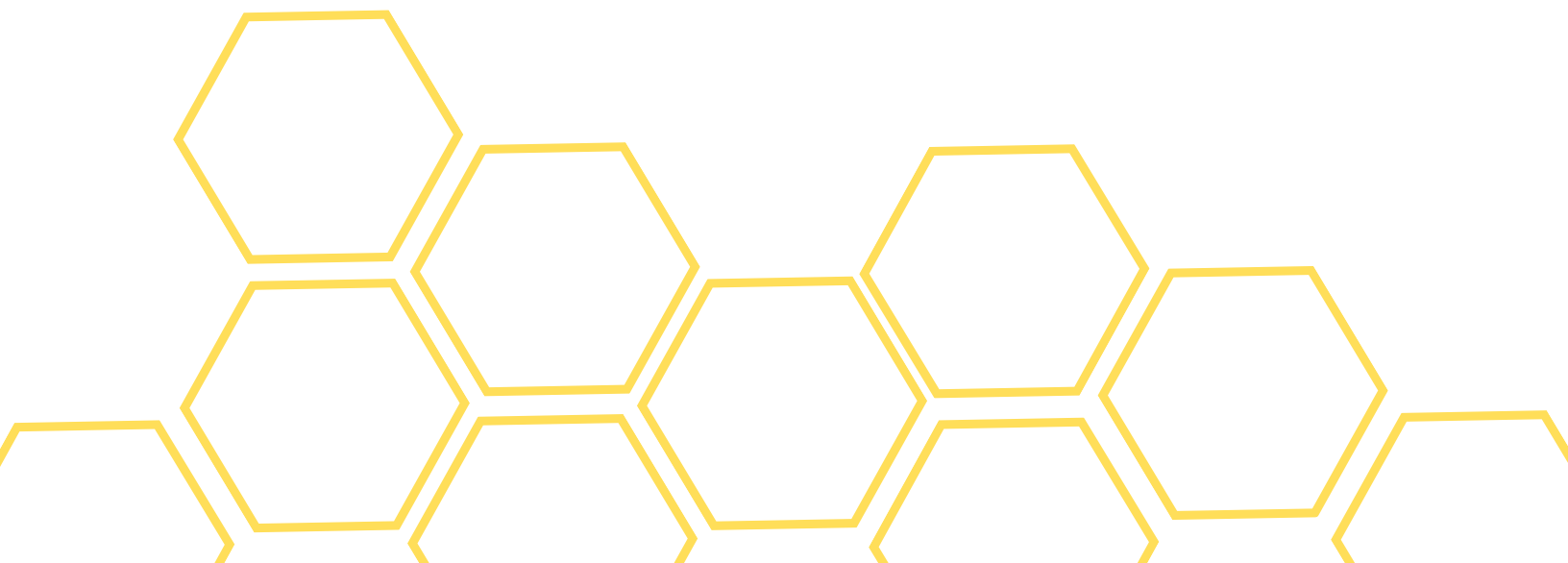
# 16 production

All aspects of STEM were incorporated into Apiculture's coasters.

**Photos** Top: Laser cutting our original Bee Balm design onto coasters at Makerspace  
Middle (L-R): Coaster design brainstorming & product testing locally sourced beeswax finish  
Bottom (L-R): Packaged coasters for sale at Far + Wide & JABC Corporate Custom Bulk Order







# technology

## Message from the Vice-President of Technology

Apiculture uses innovative technology solutions to solve a complex environmental problem. Bees are an extremely vital part of our ecosystems and technology plays an important role in building sustainable communities, agriculture, and industry. New and innovative solutions to take immediate action against impacts on our climate and pollinators are emerging. For our part, Apiculture has used technology to maximize efforts to minimize production waste, create an innovative product and engage our customers in partnering with us to achieve food security.

To create our aesthetic coasters, we used graphic design tools and apps to create the original designs for our coasters. We used software like Corel Draw, Inkscape and RD Works to make and export our bee-related designs. To put the designs on our wooden coasters we used a laser cutter at our local Makerspace community collective. A laser cutter uses innovative technology to incorporate a computer program, mirrors and high powered lasers to cut and etch designs into a wide variety of materials.

Our target demographic utilize the internet and apps every single day. To reach our target market of local 30-45 year olds, we knew we needed to have an aggressive online marketing strategy starting with a website, a Facebook and an instagram account. We made sure to educate our potential customers about our environment impact through our website, where we explained the impacts on pollinator habitats and what we can do to protect them.

Along with our online presence, we are in the initial planning phases of building an educational and interactive app. Our app would educate users on different flowers, pollinators and the broader implications of bees.





Using technology allowed us to efficiently streamline previously time-consuming processes like using digital currency and electronic payment processing when sending and receiving funds from customers and businesses. Technology also allowed us to keep track of our inventory, revenue and expenditures easier.

We applied what we learned in last year's JABC Company Program, Recycled Sounds, to this year's JABC Company Program. One of our biggest take-aways from last year's program was that direct customer sales and relationship management with a large number of customers is time extremely consuming. We adopted a business to business sales strategy this year, with the goal of reducing the time and stress involved in customer service. The commission paid to our retail partners and using digital tools to manage those relationships were excellent business decisions, resulting in reduced stress and workload.

An opportunity for improvement for next year's program is to use technology to manage and outsource product production. We will also continue to make use of modern communication tools like Slack, shared digital workspaces and Google Hangouts to better collaborate as a team. Next year we hope to use technology to build a mobile app, and further our hands-on STEM education while making a positive social and environmental impact.

Sarah Baughan  
Vice-President Technology

# app development

Our goal for developing an app is to make learning about bees and local pollinators fun and engaging for users. Our concept for a competition based app with game like features would facilitate wide-spread education on the importance of protecting bee habitats. It would touch on the impact of climate change on wild bees and how it affects food security. Our app would explain in an interactive way that by protecting pollinator habitats we are protecting our future of food security.

Imagine if this app allowed you to pledge to save the bees and track your impact. In addition, the gamification aspect would allow you to invite friends and family to pledge and track those pledges in the community.

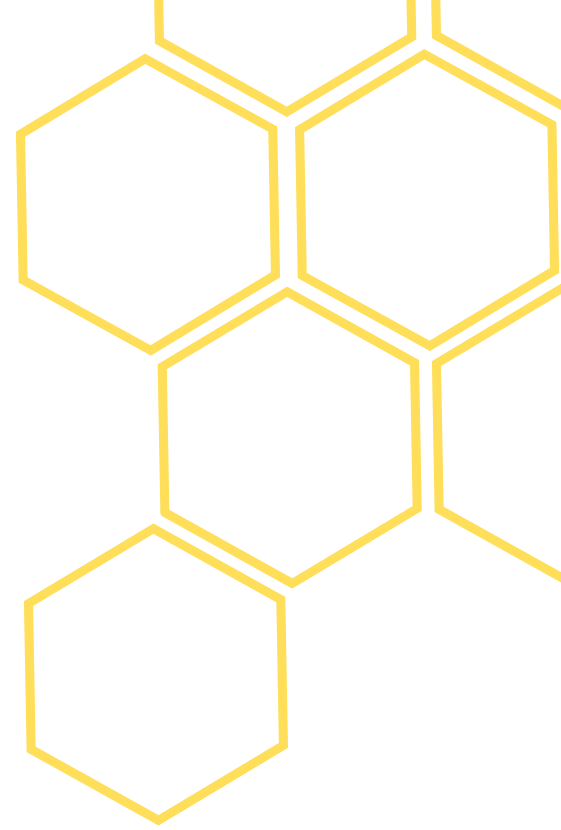
By making a competitive game app, we could build a collaborate community and shared brainpower to tackle the impacts of pollinators together.

Our product isn't just a coaster, it's a simple yet innovative way to take climate action, increase awareness, and develop partnerships to work toward our goals.. Apiculture's commitment to corporate social responsibility, online education efforts and future app development support the following UN Goals for Sustainable Development:

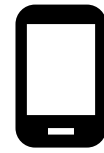
**Goal 2 to end hunger, achieve food security and improved nutrition and promote sustainable agriculture.**

**Goal 9 to build resilient infrastructure, promote sustainable industrialization and foster innovation.**

**Goal 13 to take urgent action to combat climate change and its impacts.**



# mobile app

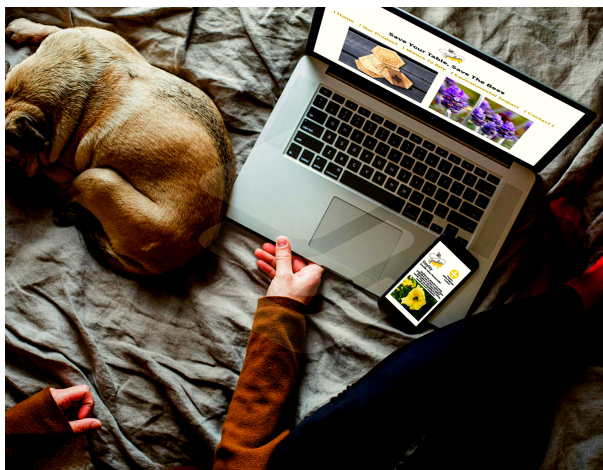
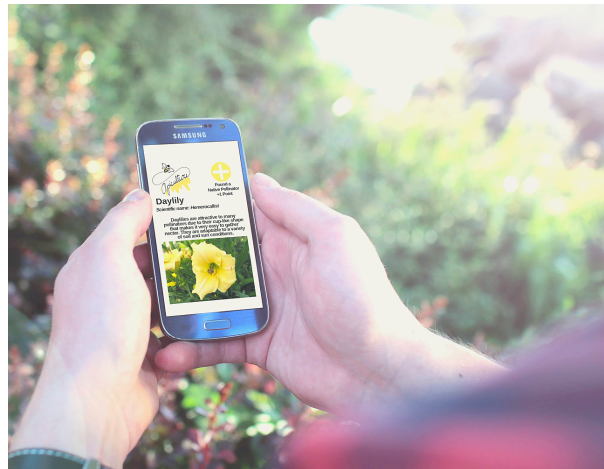
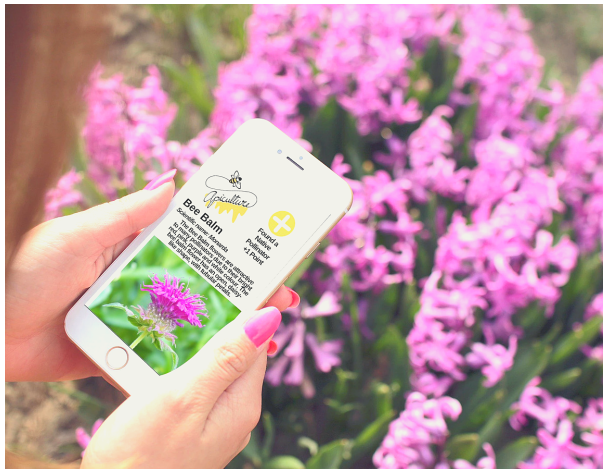


## Photos

Top: Mockup of mobile app and website integration

Middle (L-R): Mobile app mockup of native pollinating flower Bee Balm & Daylily

Bottom (L-R): Mobile and laptop mockup & native pollinating flower, lavender





## Save Your Table, Save The Bees

| [Home](#) | [Our Product](#) | [Where To Buy](#) | [Environmental Impact](#) | [Contact](#) |

# online marketing

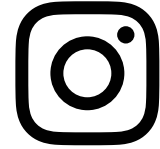
Our unique selling position is our impact on the the environment through education. Our coasters feature local bees and plants to help increase awareness about the importance of protecting pollinator habitats.

We have positioned ourselves as a local bee-centered coaster company. Our environmental impact is what sets us apart. Coasters are not a new idea, our competition list is endless, however Apiculture is more than just bee-themed coasters.

The student founders of Apiculture wanted to create a product that makes a real social and environmental impact. Our product helps prevent damage to pollinator habitats while saving your table from drink stains and damage in a aesthetically pleasing way. Our coasters feature native pollinating plants and our packaging is made out of seed paper to encourage users to plant native pollinators and get personally involved in protecting our bees, food sources and futures.

Our target market is local 30-45 year olds because they have a more disposable income and because they want to help the environment, and in return gain a product that they feel good about. They are invested in the environment and want to do their part. Our product is perfectly "Instagramable", locally sourced and #ecofriendly. Our customers get to be a part of the global climate action movement with their purchase. By packaging our product with handmade seed paper customers can also take action themselves to plant the flowers needed to help the bees. Our customers aren't just buying aesthetic coasters, they are contributing to a greener, better planet.

# social media

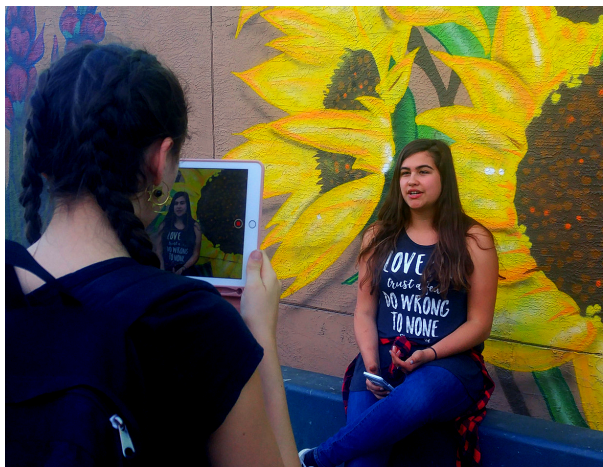


## Photos

Top: Social media post featuring apiculture coasters

Middle (L-R): Apiculture's team working at the Library & filming in the park

Bottom (L-R): Filming at the Kamloops Bee City mural & instagram post of coaster designs



“

The JA program has opened my eyes and changed my life through mentorship, teamwork and ultimately building a successful business.

The hands-on experience that JA offers is invaluable.

”

Sarah Baughan, Vice-President, Technology





“

This program showed me the beautiful ways that science and business can work together, and I'm excited to use this knowledge in my future.

”

Alia Sandeman-Allen, President & CEO



# financial report

## Message from the President & CEO

Our company began with only \$25 from each founding member, giving us a start-up capital of only \$100. However through hard work, we've transformed that original share value from \$25 to almost \$850.

The bulk of our revenue was earned through large custom corporate orders, where we unexpectedly found a lucrative market. We invested a large amount of unpaid time in a lengthy prototyping process and in-house production. We lasercut, coated, and packaged the product ourselves, which reduced labor costs and in turn generated a larger profit, but at the expense of our already busy schedules.

Our largest expense was by far our membership to Kamloops Makerspace, the co-operative workspace where we create our product. We were able to negotiate an agreement with Makerspace for a discounted monthly rate and to differ payment. We were graciously given the opportunity to repay them once started earning revenue.

After the costs of materials, memberships, and our donation to the Thompson Shuswap Master Gardeners, the cost to produce a set of coasters is higher than expected. We still managed to deliver a profit margin of \$5.28 per 4 coaster set.

Our economic impact can be measured in more than just financial reports. We have also made an impact on the people, planet, prosperity and partnerships which hold a higher value for us than profit alone. It is how we can help reach the global goal of preventing the permanent damage of climate change.





This problem is no longer in the far future, and it is one that we cannot stand by and watch. We, as the next generation, must take action now. By incorporating the UN's 17 Goals for Sustainable Development by 2030 into the framework of our business, we have found a way to take action to create a better future for ourselves, and later generations. By 2030, the year that the damage cannot be undone, we will be not even 30 years old.

This is our future, and we are doing everything in our power to make it one we want to live in, whether it's through activism, making a radical call for alarm or building sustainable businesses that are good corporate citizens.

Alia Sandeman-Allen  
President & CEO

# sales

## Sales strategy - B2B

To streamline sales and minimize investing human capital on long sales days, we adopted a direct business to business sales strategy. We focused on signing two commission-based retail sales contracts.

Almost immediately after we publicly launched our company, we realized that bulk corporate orders were a more fruitful sales strategy. We were able to quickly pivot and focus on corporate bulk sales where we could charge customers for our time spend designing custom logos. Our bulk custom orders include a three Apiculture original bee-themed designs and one custom logo, with a design fee of \$150 per order.

As of May 2019, Apiculture made sales within the following **sales channels**:

- **Business to Business (B2B)**

Our coasters sold at Far + Wide and Mustache & Go retail for \$12 and we pay a 30% commission to our partners. We have **sold 16** sets of coasters through our retail partnerships.

- **Bulk Corporate Custom Orders**

We have been inundated with corporate bulk custom orders to be used a promotional swag.. Bulk orders sell for \$12 a set, plus a one-time \$150 design set-up fee. We have **sold 380** sets of custom coaster orders.

## Share Structure

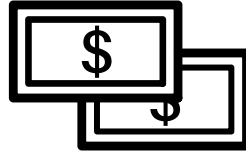
Apiculture's financial structure is a self-funded partnership with equal shares assigned to each of the four partners. Individual partners invested \$25 each towards start-up costs.



# financial milestones



**EXCEEDED  
SALES GOALS BY  
NEARLY 8X**



**INITIAL  
INVESTMENT  
\$100 (\$25 PER  
SHAREHOLDER)**



**3385% RETURN ON  
INVESTMENT**



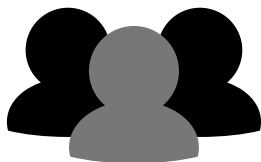
**396 SETS OF  
COASTERS SOLD**



**PROFIT OF \$5.28  
PER SET**



**OVER \$4K IN  
REVENUE**



**SELF-FUNDED  
PARTNERSHIP BY  
4 SHAREHOLDERS**



**\$396 DONATED  
TO POLLINATOR  
PROTECTION**



**PATH TO MOBILE  
APP  
DEVELOPMENT**

# financial statements

<b>Apiculture</b>	
<b>INCOME STATEMENT</b>	
<b>For the period ending June 2019</b>	
<b>Revenues</b>	
Sales	\$4,414.40
<b>Total Revenue</b>	<u>\$4,414.40</u>
<b>Less: Cost of Goods Sold</b>	
Materials & Packaging	\$203.09
	\$0.00
<b>Total Cost of Goods Sold</b>	<u>\$203.09</u>
<b>Gross Profit</b>	<u><u>\$4,211.31</u></u>
<b>Less: Other Expenses</b>	
Memberships	\$400.00
Marketing- Website, Video, Signage	\$29.35
Charitable Donation to Shuswap Master Garde	\$396.00
Other/Miscellaneous	\$0.00
<b>Total Other Expenses</b>	<u>\$825.35</u>
<b>Net Income (or Loss)</b>	<u><u>\$3,385.96</u></u>



**Apiculture**  
**BALANCE SHEET**  
**As at June 2019**

**Assets**

Cash in Bank / in hand	\$45.27	
	\$0.00	
Remaining Inventory	\$400.00	
<b>Total Assets</b>		<b>\$445.27</b>

**Liabilities and Shareholder's Equity**

**Liabilities**

Accounts payable	\$0.00	
Loans	\$100.00	
<b>Total Liabilities</b>		<b>\$100.00</b>

Shareholder's Equity

Capital Stock- 4 shares at \$25/share	\$100.00	
Accumulated Net Income (or Loss)	\$3,385.96	
<b>Total Shareholder's Equity</b>		<b>\$3,485.96</b>

<b>Total Liabilities and Shareholder's Equity</b>		<b>\$3,585.96</b>
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**DISTRIBUTION REPORT**

June 2019

Cash available for Distribution	\$3,385.96	
Number of Shares in the Company	4	
<b>Cash available per Share</b>		<b>\$846.49</b>

**RETURN ON SHAREHOLDER'S INVESTMENT**

June 2019

	<u>All Shares</u>	<u>Per Share</u>
Original Shareholder's Investment	\$100.00	\$25.00
Net Income (or Loss)	<u>\$3,385.96</u>	<u>\$846.49</u>
<b>Return on Investment</b>	<b>CA\$3,285.96</b>	<b>3385.96%</b>

# executive



**ALIA SANDEMAN-ALLEN**  
PRESIDENT & CEO

**Previous JABC Programs:** JABC EFS@TRU (2017), Company Program (2017) & Be Entrepreneurial (2019)

Alia Sandeman-Allen is the President of a previous JABC Company Program, Recycled Sounds, that she and Sarah Baughan continue to operate. Alia is proud to have built on her previous business experience to help the Apiculture team be successful. In her free time, she can be found looking into potential business ideas, writing poetry or playing rugby.



**SOFIA SIRIANNI**  
VICE-PRESIDENT, MARKETING

**Previous JABC Programs:** EFS@TRU (2017) & Be Entrepreneurial (2019)

Sofia Sirianni is the creative mind behind the Apiculture marketing team. Her skills lead her to learning new design software and programs to contribute to the company. As a leader she helped the team stay on task and move forward successfully. When not working hard on the company, Sofia can be found creating something from a simple sketch to ceramic sculpture.



**TYSON MCDANIEL**  
VICE-PRESIDENT, HUMAN RESOURCES & CORPORATE SOCIAL RESPONSIBILITY

**Previous JABC Programs:** Be Entrepreneurial (2019)

Tyson McDaniel is the glue that ties Apiculture together. From his quick wit to his lighthearted meeting notes, Tyson makes business fun. He keeps Apiculture on task and following best practices for waste reduction and corporate social responsibility. In his free time, he can be found reviewing notes of the last meeting, drawing, or at the baseball field.



**SARAH BAUGHAN**  
VICE-PRESIDENT, TECHNOLOGY

**Previous JABC Programs:** JABC EFS@TRU (2017), Company Program (2017) & Be Entrepreneurial (2019)

Sarah Baughan's attention to detail and eye for colours developed Apiculture's pleasing aesthetic. She applied the skills she learnt in the first STEMInists program to Apiculture's marketing and sales strategy. She was also in charge of tech, including the social media accounts and website. In her free time she can be seen singing, skiing, writing or drawing.



# mentors

Through JABC's STEM-focused Company Program, we had the opportunity to work with mentors who are excelling in STEM careers, business and leadership to bring our ideas to life.



## ANGELA HAPKE

CO-FOUNDER AND COO  
CENTRAL REFERRAL SOLUTIONS INC.

Angela Hapke has held project management roles for over 15 years in the tourism, technology, and healthcare industries. She holds a Masters in Business Administration and recently, Angela has co-founded and become the COO of a health technology company based in Kamloops BC. In addition to the entrepreneurial perils she now faces, Angela spends as much time as possible with her husband and 2 young girls.



## HOPE MIKAL

PROJECT MANAGER, PEPPER & DIRECTOR OF  
COMMUNICATIONS, PCMA CANADA WEST

Hope Mikal is a creative marketer and copywriter with a diverse portfolio, including clients in the realm of non-profits, film, festivals and event management, and a personal highlight - TED Talks LLC. Presently, she is a virtual project manager to professional photographers across North America at Pepper. More often than not, Hope can be found outside hiking/camping or spending time with the people she loves.



## KARA WRIGHT

JABC PROGRAM COORDINATOR

Kara Wright is the former Head Coach of Champion Her, a triathlon team aimed at breaking down barriers for entry into sport that women face, for which she was nominated for the 2017 Kamloops Sportsperson of the Year. Kara started the first Junior Achievement STEM-focused Company Program in Canada aimed at opening doors for women and girls in STEM, business and leadership.



## NICHOLAS ADAMS

FOUNDER & BOARD CHAIR, KAMLOOPS MAKERSPACE

Nicholas Adams is a founding member of Kamloops MakerSpace and he spends a lot of his spare time volunteering in the community through Rotary and JABC. In 2018 he ran for a seat on Kamloops City Council. Nicholas has successfully started and sold multiple businesses and social enterprises. He is now working on a MakerBus that mobilizes the education, engagement, and empowerment of building things.



# women in stem

## JABC's STEM-focused Company Program

The global STEM+inist movement advocates for gender equality in Science, Technology, Engineering, and Math. In 2018, JABC launched the first - and only of its kind in Canada - STEM-focused Company Program for girls with overwhelming success.

We also quickly learned that you don't have to be female to be a feminist, and workplace equality won't happen if women have to work to affect change without much needed male allies. With this in mind, we made some important changes to JABC's STEM-focused after-school Company Program.

We are now proud to encourage students and mentor participation regardless of gender. Our second JABC STEM-focused Company Program cohort, Apiculture, includes a young feminist, Tyson McDaniel a grade 8 student who has been a valuable member of the team as the Vice-President of Human Resources and Corporate Social Responsibility.

“ There are plenty of proud male feminists, but to make equality a reality we need to draw more into the conversation. Gender equality is not a 'women's issue'.

- Julia Gilliard, Former Australian Prime Minister & Chair of the Global Institute for Women's Leadership ”

Indeed, equality is not just a women's issue. It is societal issue, an economic issue and a human rights issue. In Canada, women represent the majority of university graduates, but only 39% of STEM grads are women, compared to 66% in other programs. Women are also underrepresented in the boardroom. In 2016, one-fifth of board seats were held by women (up from 10.9% in 2001!), but 45% of companies listed on the TSX had no female board members.

Stats Canada has reported that having more women in STEM-related programs and jobs can be directly linked to a country's competitiveness and prosperity. Despite the economic benefits and girls' interest in STEM fields, less than 4% of girls are mentored to go into STEM-related careers.





Thank you to the mentors & subject matter experts who are helping us open doors for girls and women in STEM, business and leadership positions. Special thanks to:

- Angela Hapke, COO & Co-Founder, Central Referral Solutions Inc.
- Hope Mikal, Project Manager, Pepper & Director of Communications, PCMA Canada West
- Beth Quirie, Community Builder, Kamloops Innovation Centre
- Brianne Sheppard, Co-Owner, Far + Wide
- Nicholas Adams, Board Chair, Kamloops Makerspace
- Vaughn Warren, Artist & Board Director, Kamloops Makerspace
- Elaine Sedgeman, Citizen Science Coordinator, Thompson Shuswap Master Gardeners
- The City of Kamloops
- Kamloops Food Policy Council
- Community Futures
- Amy Leaf, Realtor, Royal LePage Realty
- George Casimir, CFDC of CIFN

Because of the collaborating between these stakeholders, community groups, mentors and subject matter experts, students learn not only about STEM, business, and leadership. They also gain the hands-on experience that empowers them to call themselves Vice-Presidents and President with confidence.

Kara Wright JABC Program Coordinator



JABC's STEMInist Company Program supports the UN's Sustainable Development Goal 5 to achieve gender equality and empower all women and girls and Goal 17 to revitalize the global partnership for sustainable development.



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