Bees as Biosensors to Track Biodiversity

LEAD INVESTOR ⌃

Jesse Fripp   Principal & CEO, Shining Rock Ventures

I invested in HiveTracks due to a combination of their established solutions track-record with beekeepers around the world, the quality and experience of the management team, and their focus on using crowd-sourced, bee-driven data as a tool to both serve millions of beekeepers with critical insights and information, and also address predictive analytics, source-origin and other data opportunities in the bee and honey-related value chains, which are valued in the hundreds of billions USD. Not least, their nature-based solutions approach is grounded in a strong mission commitment, as evidenced by their public-sector partnerships in the US and internationally to provide their tools to smallhold beekeepers, among others.

Invested $5,000 this round & $125,638 previously

Learn about Lead Investors

hivetracks.com   Creston NC

Highlights

(1)   Successfully closed and oversubscribed $500k pre-seed round earlier this year, raising $635k.

(2)   20,000+ beekeeper community, 225,000+ tracked Hives

(3)   New B2C beekeeper app launched in 2022 with 6,000+ downloads

(4) $250k+ in government contracts since 2021

(5)   1000+ B2C, 7+ B2B and 4+ B2G customers

Our Team

Max Rünzel   CEO & Co-Founder

Max is CEO and Co-Founder of HiveTracks and an expert on digitalization and empowerment of smallholder producers. He formerly worked at the FAO, the Food and Agriculture Organization of the United Nations.

75% of the food we produce depends upon natural pollinators like bees. Keeping bees healthy in healthy ecosystems is essential to our planet and a key driver to making the world more resilient in the face of ever more adverse climatic events.

James Wilkes   Founder and CBO

James is a professor of computer science, experienced beekeeper and local food producer. He helped pioneer data-driven research in the bee space in the U.S. by founding the first beekeeping app used by thousands of beekeepers worldwide.

Laura Dye COO & Co-Founder

Laura is a focused, strategic, and entrepreneurial leader with a proven track record in top sales achievement. She's worked with companies in several industries to identify and quantify the value of implementing new technology solutions.

SHOW MORE

Pitch

HiveTracks is the bee data company in the world! We create data-driven innovation to solve some of the biggest problems of our time — from sustaining biodiversity to global food-stability.

Today, the lack of data poses the biggest roadblock in creating lasting positive change for companies and governments willing to tackle the loss of biodiversity and improving food stability. Because how can we change what we cannot measure?

Measuring biodiversity is almost impossible to do at scale because it is hardware intensive, requires manual surveys (*like people in white lab coats making lists of how many beetles they saw!*) and, thus, super expensive. Meanwhile, ESG reporting is starting to incorporate companies' biodiversity impact as global food chains are under pressure. There is an immense need to get biodiversity data at scale.

Bees as Biosensors? Yes. Deeply connected to their ecosystems, bees are knowledgeable biosensors measuring the health of the environment and biodiversity in the 1,256 hectares every single bee forages. They detect environmental and climate impacts earlier than we can and behave and respond to it immediately. What if we could access their intelligence?

Our Surprising Solution:

Many insects are biosensors, but honey bees have a deeper relationship and interaction with humans—beekeepers—with whom they can share their valuable environmental intelligence. Beekeepers know if the bees aren't healthy and their frequent hive inspections reveal approximately 50 data points with each record. So HiveTracks empowers both the bees and their keepers with technology-powered products to crowd-source environmental data to create a planet-positive impact.

The health and behavior of bees, their rate of pollination and productivity, together with weather data and local flora, allows us to **derive local biodiversity, climate impacts, and pollination at a ground-truthed, highly granular level**. Our beekeepers around the world spin a tightly-woven community of nature experts highly sensitive to their bees' behavioral patterns. They are our companions.
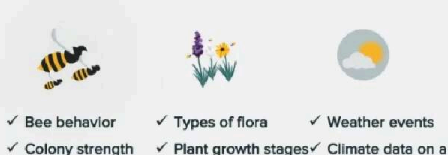
<u>Our Business Model:</u>
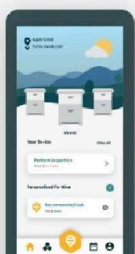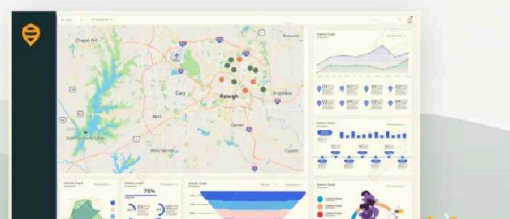
Our app, The Beekeeper's Companion, manages and optimizes tasks for beekeepers worldwide on the basis of data-driven best-practices. This community intelligence is key because no one knows bees better than their keepers. Communitizing their experience improves bee health, promotes better beekeeping, and drives everything a beekeeper loves:

✓ Increased honey harvest
✓ Increased overwintering rate
✓ Detecting diseases earlier
✓ Learning from the community of beekeepers

But while we serve our passionate community with an essential tool, the app automates the community-sourcing of vital environmental intelligence: bee data. Knowing the health of hives locally and globally, knowing what blooms when and where, and being able to relate these patterns to other climate factors unlocks a unique data set simply impossible to unearth otherwise.

Our app as a SaaS-subscription on both app stores is a gateway to building a

sustainable community of beekeepers unlocking local environmental intelligence globally.

The community-sourced biodata together with our science-led proprietary data models provide a groundbreaking way to monitor, predict and certify valuable data-driven solutions. It is possible to:

✓ Monitor Biodiversity - from locally to globally *(yes!)*
✓ Predict growth phases for pollination-dependent crops
✓ Authenticate origin of agricultural products
✓ Develop at-scale environmental monitoring

With 225k+ hives tracked to-date, HiveTracks bees have covered over 275 m hectares (765 m acres) - *that's approximately half of the agricultural area of the US and more than the entirety of Europe's farm land!*

That proves that sourcing and monitoring environmental data from bees is scalable. The commercial applications of this are powerful:

Our Bee Data unlocks tangible value:

Biodiversity as a Service

Agricultural Forecasting

Origin Authentification

Environmental Monitoring

In a $70 billion addressable market in AgriFoodTech.

Commodities, Finance, Trade

Farmers and producers

Sellers of produce

Governments & Agencies

Using this "environmental intelligence," we bring to life impactful paid solutions for governments, agriculture and for organizations wishing to monitor their local

biodiversity impact. To date, we have secured $250k in government contracts.

The Opportunity is BIG:
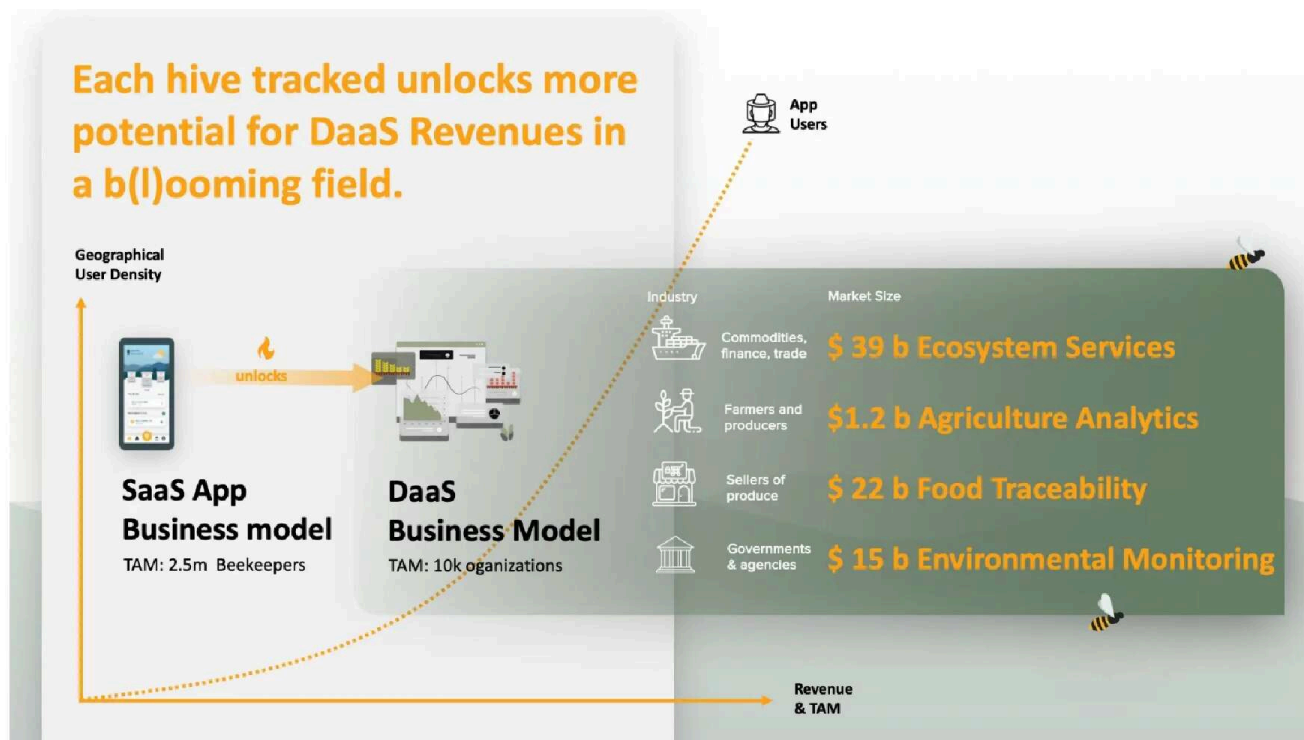
We are confident that HiveTracks provides a unique solution to one of the biggest and most relevant opportunities of our time, using a proprietary science-based approach that is almost impossible to copy.

HiveTracks is in the booming AgriFoodTech space, which has seen investments increasing at a strong rate. The projected market for precision agriculture is $12.7 billion by 2025, and AgriFoodTech VC funding increased by 59% in 2021.

$27,8

2017
2018
2019
2020
2021

$21,3 $22,1

$8,7 $12,3

Projected Precision
Agriculture Market
by 2025

Precision
Agriculture Market
growth until 2025

Growth rate of
Data Management
sector in Precision
Agriculture by 2025

Annual AgTech Financings in billion $

🐝 HiveTracks
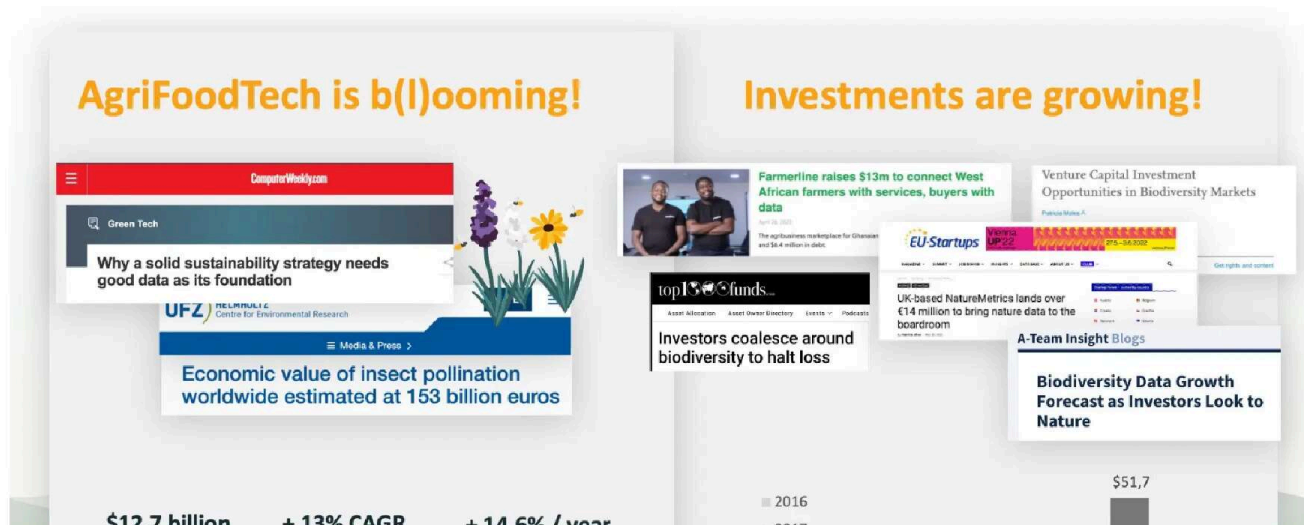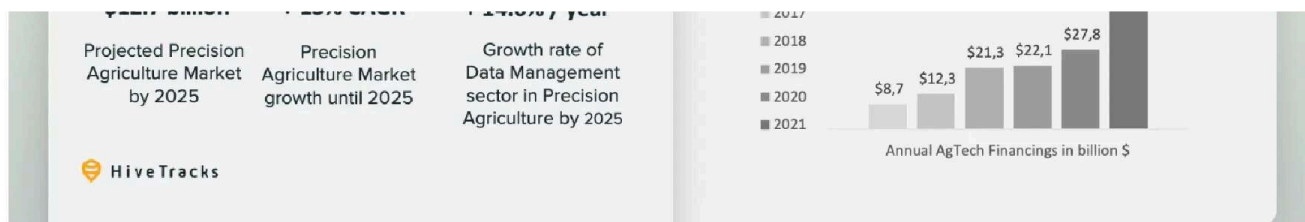
Use of funds

We plan to scale our MVP to create the biggest impact! With your funds, you become part of real change. Your equity in our company is part of humanity's equity in our planet. To date, we have raised over $600k that we have invested in rebuilding our technology stack, bringing our MVP to market, and building a team that is ready to grow and scale HiveTracks.

We believe, REAL IMPACT needs to be funded by REAL people! That's why we crowd-raise $1million.

✓ 18 months runway @$55k burn
✓ 75% in staff: Dev, UUX/UI, Data Science, Comms, Support and Management
✓ 15% in Sales & Marketing
✓ 10% General & Admin expenses

JOIN THE JOURNEY!

$75
$100 — General & Administrative
$250 — Product Development & Support
$150 — Business Development & Marketing (~133k in target advertisement at a CAC of $ 19)
$1.000
$500 — Wages, Contractors & Consulting
$75 — Remaining cash in Q2 2024

CASH IN VS CASH OUT
Q1 2023 – Q2 2024

7.5% of funds raised will go towards the Wefunder intermediary fee.

$1M as a growth round will help us achieve:

✓ a goal of 5,000 paid B2C customers by improving mobile functionality, optimizing onboarding, and refining engagement

✓ 5+ new B2B and 5+ B2G customers by launching our admin portal that seamlessly integrates with our mobile app and a one-to-many subscription

✓ Critical mass and strategic density to build a valuable dataset

- Forward looking projections cannot be guaranteed.

Your investment has an immediate impact:

✓ It helps us increase the network of beekeepers that each protect and monitor biodiversity locally through their beekeeping practices and guided by our app

✓ It helps governments, NGOs and organizations worldwide to measure and manage their impact on biodiversity

✓ It increases beekeeper livelihoods, pollination-dependent food availability for consumers, and predictability and resiliency for farmers who rely on pollinators

Reasons to invest

We have been pioneers since 2010 and are aiming to create the largest actionable biodiversity data set in the world. Bees are our sensors and beekeepers are our companions in cultivating a one-of-a-kind scalable, sustainable and impactful ecosystem of environmental data helping to drive real impact.

Our clients are already loving it, including the German Federal Foreign Office and green financial institutions. Additionally, smallholder beekeepers in Ethiopia and Uzbekistan are improving their livelihoods through better hive management practices facilitated by our app, and consumers are experiencing increased food safety by knowing exactly where their honey originated.

Don't worry, we're not only innovative, but also smart *(as in Professor-kind of smart):*

Our innovation is driven by our own pioneering scientific research:

HiveTracks builds on its strong Science Panel, which has researched and published the industry-standard of data science in the beekeeping space for decades.

Prof. James Wilkes

Beekeeper, Farmer & Professor of Computer Science at Appalachian State University

- Science-Focused Founder of HiveTracks
- Pioneering cloud and mobile technology in the beekeeping space
- 10m+ Research Grants by USDA

Prof. Joseph Cazier

Professor of Computer Information Systems at Arizona State University

- Educational Analytics, Ecological Analytics, Energy Analytics, and Health Analytics
- 60 Articles, 15 Book chapters, 3 United Nations Guidelines.

The heart of HiveTracks is based on our academic, data-driven research generated by our founder James Wilkes (Professor of Computer Science) and our data-science expert Joseph Cazier (Professor of Computer Information Systems) which have published in the beekeeping space for years.

Join Us Today

Your investment goes towards a measurable planet-positive impact while pioneering a nature-driven way to leverage positive impact commercially.