“Bugs on the Menu”
(2016 / Canada / DCP / 78:00 minutes)

INTERNATIONAL SALES AND DISTRIBUTION
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PRODUCER CONTACT
Mark Bradley / Ian Toews
291 Film Company Inc.
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www.291filmcompany.ca

Social Media (Twitter / Facebook / Instagram / YouTube)
@bugsonthemenus #bugsonthemenus

For more information, please visit:
www.bugsonthemenus.com
**Info Sheet**

**Title:** Bugs on the Menu

**Log Line:** The answer to feeding the world’s expanding population may be smaller than you think.

**Genre:** Feature Documentary (Food, Environment, Social Interest)

**Shooting Format:** Arri Alexa

**Versions/Length:**
- 1 x 78:00 minutes (Theatrical DCP / Broadcast version)
- 1 x 52:00 minutes (International version)

**Production Country:** Canada

**Original Language:** English

**Year of Completion:** 2016

**Prod. Co.:** Bugs Productions Inc.

**Producers:** Mark Bradley, Ian Toews

**Director:** Ian Toews

**Cinematographer:** Ian Toews csc

**Writers:** Mark Bradley, Jason Nielsen, Ian Toews

**Editor:** Jason Nielsen

**Original Score:** Brendan Ostrander, Darren Phillips

**Featuring:**
- Dr. Luis Tarango Arambula
- Jack Armstrong
- Davy Blouzard
- Andrew Brentano
- Roy Burgman
- Marieke Calis
- Warren Carter
- Pat Crowley
- Laura D’Asaro
- Meuru Dhalwala
- Dr. Florence Dunkel
- Darren Goldin
- David George Gordon
- Jack Griffith
- Doreen Ketchens
- Gabi Lewis
- Philip Maluleke
- Florence Mashau
- Gabe Mott
- Alan Nichols
- Sonny Ramaswamy
- Lin Seynave
- Dr. Arnold van Huis
- Vikram Vig
- Vi Wai
- Wat Wai
- Yem Wai
- Sarah Wilson

**Trailer:** [www.bugsonthemenu.com](http://www.bugsonthemenu.com)
Film Festival Official Selections

Tofino Film Festival, Tofino Canada (February 19, 2017)

Victoria Film Festival, Victoria, Canada (February 5, 2017)

Devour! The Food Film Fest, Wolfville, Canada (November 2, 2016)

Heartland Film Festival, Indianapolis, USA (October 26-29, 2016)

Environmental Film Festival Australia (Festival and Tour)
Melbourne, Australia (October 4, 2016)
Brisbane, Australia (October 14, 2016)
Canberra, Australia (October 15, 2016)
Sydney, Australia (October 21, 2016)

Calgary International Film Festival, Calgary, Canada (Sept 27, 2016)

Cinéfest Sudbury International Film Festival, Sudbury, Canada (Sept 18, 2016)

Feast Food and Film Festival, Victoria, Canada (May 13 & 15, 2016)

NORTHWESTFEST, Edmonton, Canada (May 6, 2016)

Broadcasters

*documentary* Channel (Canada)
PREMIERE: Tuesday, Oct 11, 2016 at 9:00pm ET / 6pm PT
1st ENCORE: Sunday, Oct 16, 2016 at 9:00pm ET / 10:00pm PT
2nd ENCORE: Monday, November 21, 2016 at 10:00pm ET

Awards
Nominated for a 2017 Canadian Screen Award for Best Cross-Platform Project - Non-Fiction.

Nominated for the 2016 “Made in Canada Feature” Award at NORTHWESTFEST.
Synopses

FEATURE DOCUMENTARY – LOG LINE “A” [90 CHARACTERS]
The answer to feeding the world’s expanding population may be smaller than you think.

FEATURE DOCUMENTARY – LOG LINE “B” [120 CHARACTERS]
Bugs on the Menu travels worldwide to explore health and environmental benefits of insect protein for human consumption.

FEATURE DOCUMENTARY – SHORT SYNOPSIS [200 WORDS]
SYNOPSIS - FEATURE DOC
The feature sustainable food documentary Bugs on the Menu was shot in four continents over two years. It is a comprehensive examination of entomophagy (aka: ‘bug eating’), from the perspectives of cultural traditions in Latin America, Africa, and SE Asia. Experts Dr. Arnold van Huis of The Netherlands (author of the UN report “Edible Insects”) and Washington D.C.’s Sonny Ramaswamy of the USDA provide scientific analysis of this food industry revolution.

It also follows startup companies, such as Ontario’s Entomo Farms, Salt Lake City’s Shark Tank-winning Chapul, Boston’s female-led insect chip company Six Foods, Austin’s Hult Prize-winning Aspire Food Group, Vancouver’s famed Indian restaurant Vij’s, and Seattle’s celebrity cook, The Bug Chef. These and other restaurateurs, cricket farmers, scholars, and scientists are part of a movement to normalize insect eating in the west, as an alternative to accepted, but resource intensive proteins like chicken, pork, and beef.

WEBSITE SYNOPSIS - SHORT [75 WORDS]
The companion Bugs on the Menu website offers a fun, animated, visual way of learning about entomophagy. It includes a parallaxing interface, with animated statistics, and webisodes featuring a variety of chefs preparing recipes with insect protein. Users are encouraged to try the recipes and share the results on our social media feed, after learning the facts about bug eating.

Website Producer: Bugs Productions Inc.
Digital Service Provider: Emmy Award-winning Secret Location
www.bugsonthemenu.com
FEATURE DOCUMENTARY – LONG SYNOPSIS [500 WORDS]
The sound of crickets isn’t always a good thing, but to the entrepreneurs of Entomo Farms, it’s the sound of their rapidly growing business. The Goldin brothers raise cricket protein for human consumption, and they’ve seen their farm grow tenfold in 24 months. The surge of interest has been sparked by a 200-page UN report outlining the health and environmental benefits of insect protein -- that has been downloaded 7 million times. While an estimated 2 billion people eat bugs worldwide, it’s still not an accepted food in the west. With the population projected to surpass 9 billion by 2050, the time to consider alternate proteins is now.

_Bugs on the Menu_ follows startup companies, such as Entomo Farms, as well as Salt Lake City’s _Shark Tank_-winning Chapul, Boston’s female-led insect chip company Six Foods, Austin’s Hult Prize-winning Aspire Food Group, Vancouver’s famed Indian restaurant Vij’s, and Seattle’s celebrity cook, The Bug Chef. These and other restaurateurs, cricket farmers, scholars, and scientists are part of a movement to normalize insect eating in the west, as an alternative to accepted, but resource intensive proteins like chicken, pork, and beef.

There have been some other breakout successes in the western entomophagy industry in the last few years. Chapul founder Pat Crowley raised startup money on _Shark Tank_, securing a $50,000 deal with celebrity investor Mark Cuban. Six Foods raised over $30,000 on Kickstarter to start their Chirps cricket chips business. Aspire won the one million dollar Hult Prize, presented by President Bill Clinton.

Travelling worldwide, the feature sustainable food documentary _Bugs on the Menu_ is a comprehensive examination of bug eating, observing these traditions in South Africa, Mexico, and Cambodia. Experts Dr. Arnold van Huis of The Netherlands (author of the UN report “Edible Insects”) and Washington D.C.’s Sonny Ramaswamy of the USDA provide scientific analysis of this food industry revolution.

The answer to feeding the world’s expanding population may be smaller than you think.
Press Notes

TELEVISION
CP24 Toronto’s Breaking News (Video): “Bugs on the Menu: The breakfast gang tries getting their protein through some unconventional breakfast fare — bugs!”

CTV News (Video): Bugs on the menu: Victoria restaurants buzzing with new dishes by Travis Prasad

Global News (Video): Victoria restaurants “bugging out” by Kylie Stanton

Shaw TV (Video): Insects on the Menu by Lisa Pysmenny

Global TV Edmonton (Video) – “The Tomato” Food Magazine Editor on Bugs on the Menu

NORTHWESTFEST Premiere

PRINT
The Globe and Mail: “Are protein-packed bugs the new superfood?” by Alexandra Gill

The Sudbury Star: "Final touches revealed for Sudbury's Cinéfest" by Keith Dempsey

Calgary Herald: "Five things: Calgary International Film Festival" by Eric Volmers

Calgary Herald: "Calgary International Film Festival announces documentary lineup" by Louis B. Hobson

Calgary Herald: "Canadian biopic Maudie to open Calgary International Film Festival, Robert Cuffley's Chokeslam to close" by Eric Volmers

Metro News: "Fearsome females head Calgary Film Fest gala nights" by Aaron Chatha

Cinéfest Sudbury "Cinéfest Sudbury Announces Final 2016 Cana-Doc Programme"

Times Colonist: "Jiminy Cricket! Bugs on the menu" by Michael D. Reid (Front page of print edition)

EAT Magazine: "Bugs on the Menu" by Joseph Blake (2016 May/June Issue, Pages 14-15)

BLOGS
Review: “Bugs on the Menu: A Tasty TV Treat” by James Bawden

The Concordian: “Snap, crackle, chirp: Crickets and the future of food” by Tiffany Lafleur

Two Hungry Blokes: “Bugs on the Menu to Debut on documentary Channel Oct 11th! & Its Future”

CIFF Photos from Green Carpet Gala Premiere of Bugs on the Menu (Photos by Damaris Martinez, Liam Prost, Arielle Lessard, Jarrett Edmund, Charlie McAnulty)

Cinéfest Sudbury Announces Final 2016 Cana-Doc Programme

Concrete Garden (Sustainable Urban Agriculture Blog): Coming to a Menu Near You: Bugs by Adrian Paradis

Two Hungry Blokes (Food Blog): "Bug Appetite! Bugs on the Menu Victoria Debut & Where to Eat Them!"
RADIO
Newstalk 980 CKNW Vancouver. Ian Toews interview by Jon McComb.

CBC Radio - Ottawa Morning: “Interview with Director Ian Toews”

RCI Radio Canada International “Documentary Bugs on the Menu” by Marc Montgomery

News 1130: “Local documentary claims insects could solve world hunger” by Simon Druker

The Todd Veinotte Show: “Ian Toews Interview” (Episode 99, Starts at 35:30)

The Green Majority: “3D Chess on A 1D Board (Episode #523)” by Daryn Caister (Interview with Ian Toews starts at 21:15)

The Charles Adler Show, Sirius XM. Ian Toews interview by Charles Adler.

Newstalk 1010 Toronto. Two Ian Toews interviews by Dave Eddie and Ted Woloshyn.

AM680 CJOB Winnipeg. Ian Toews interview by Brett Megarry and Greg Mackling.


CBC Radio: The Homestretch “CIFF 2016: Bugs on the Menu director Ian Toews” Interview by Doug Dirks

CFAX 1070 (Radio): Pamela McCall interviews Producer/Director/DOP Ian Toews and Producer Mark Bradley (May 11, 2016)

CBC Radio, Edmonton AM (Radio): Interview with Director/Producer Ian Toews and Producer Mark Bradley (May 6, 2016)

PANELS/DISCUSSIONS
Behind the Screen Series - In Conversation: Documentary Filmmaking (Monday, September 26, 5:30pm, Cafe Blanca (Calgary). Featuring Bugs on the Menu’s Ian Toews and Mark Bradley.
Social Media Cheat Sheet

TWITTER / FACEBOOK / INSTAGRAM / YOUTUBE
@BugsontheMenu

www.twitter.com/bugsonthemenu
www.facebook.com/bugsonthemenu
www.instagram.com/bugsonthemenu
www.youtube.com/channel/UCUz9RtwxKRzH5EeY1IdP2zQ

OFFICIAL HASHTAG
#bugsonthemenu

ADDITIONAL RECOMMENDED HASHTAGS
#fooddocumentary
#entomophagy
#cricketprotein
#sustainability
#futureoffood
#webisodes

RECOMMENDED LINKS
www.bugsonthemenu.com

Link to our website address as much as possible in your social media messages. It is a one-stop shop for learning about bug eating, health and environmental statistics, trailer and info on the feature documentary, and of course the chef webisodes!

SUGGESTED TWEETS

Coming soon to a table near you! #bugsonthemenu www.bugsonthemenu.com

Have you ever eaten a bug? Think again: www.bugsonthemenu.com

2 billion people worldwide already consume insects as a part of their regular diet. #sustainability @BugsontheMenu

@BugsontheMenu was shot on four continents over two years! #epic #fooddocumentary www.bugsonthemenu.com

Cricket farming takes shockingly less land, water, and feed than traditional proteins, like chicken, pigs, and cows. www.bugsonthemenu.com

The answer to feeding the world’s expanding population may be smaller than you think. #bugsonthemenu www.bugsonthemenu.com

Chefs are putting #bugsonthemenu. Find out why: www.bugsonthemenu.com @_partandparcel_ @originbakery @TheClayPigeon @BigWheelBurger

FUNDER TWEETS
@BugsontheMenu is coming soon to documentary Channel! @cbcdocs www.bugsonthemenu.com

@TELUSSFund is bringing health and wellness content to all Canadians! Check out www.bugsonthemenu.com #entomophagy #fooddocumentary

@BellFund helped bring @BugsontheMenu to the screen. See why so many people are eating bugs! www.bugsonthemenu.com
BUGS ON THE MENU PARTNERS ON TWITTER

documentary Channel (Canadian broadcaster)
@cbcdocs

TELUS Fund (Canadian funder)
@TELUSFund

Bell Fund (Canadian funder)
@BellFund

Creative BC (Canadian funder)
@creativebcs

Canada Media Fund (Canadian funder)
@CMF_FMC

Indiecan Entertainment (International Sales and Distribution)
@IndieCanEnt

KEY INTERVIEWEES ON TWITTER

JACK ARMSTRONG, Armstrong’s Crickets (West Monroe, LA)
@ArmstrngCricket

ANDREW BRENTANO, Tiny Farms (San Leandro, CA)
@tiny_farms

PAT CROWLEY
Chapul (Salt Lake City, UT)
@chapul

LAURA D’ASARO
Six Foods, Chirps Chips (Boston, MA)
@chirpschips

DARREN GOLDIN
Entomo Farms (Peterborough, ON)
@EntomoFarms

DAVID GEORGE GORDON
The Bug Chef (Seattle, WA)
@thebugchef

GABI LEWIS
eXo (New York, NY)
@Exo_Protein

GABE MOTT
Aspire Food Group (Oaxaca, Mexico / Austin, TX)
@AspireAmerica

ALAN NICHOLS
Explorers Club (New York, NY)
@ExplorersClub

SONNY RAMASWAMY
National Institute of Food and Agriculture, USDA
@Sonny_NIFA

DR. ARNOLD VAN HUIS
Wageningen University (Wageningen, The Netherlands)
@avanhuis

VIKRAM VIJ
Vij’s Restaurant (Vancouver, BC)
@EatDrinkVijs

SARAH WILSON
The Grasshopper Festival (Republic, WA)
@GrasshopperFest
WEBISODE CHEF / RESTAURANT LIST
Featured at www.bugsonthemenu.com

Part and Parcel
Chef: Grant Gard
Dish: Cricket Cavatelli
Twitter: @partandparcel
Facebook: https://www.facebook.com/partandparcelvictoria/
Instagram: https://www.instagram.com/partandparcelvictoria/

OLO
Chef: Brad Holmes
Dish: Caramel Cricket Crunch Sorbet
Twitter: @olo_restaurant
Facebook: https://www.facebook.com/olorestaurant/
Instagram: https://www.instagram.com/olorestaurant/

Origin Bakery
Chef: Tara Black
Dish: Hearty Bug Nut Brown Bread
Twitter: @originbakery
Facebook: https://www.facebook.com/Origin-Bakery-165201037708/
Instagram: https://www.instagram.com/originbakery/
Big Wheel Burger
Chef: Jason Ducklow
Dish: Critter Fritter Burger
Twitter: @BigWheelBurger
Facebook: https://www.facebook.com/BigWheelBurger
Instagram: https://www.instagram.com/bigwheelburger1/

Choux Choux Charcuterie
Chef: Matthew Swiech
Dish: Punaise Terrine
Twitter: @ChouxChouxCharc
Facebook: https://www.facebook.com/Choux-Choux-Charcuterie-180693861978582/?fref=ts
Instagram: https://www.instagram.com/chouxchouxcharcuterie/

The Clay Pigeon
Chef: Marko Nizic
Dish: Orange Ricotta Cricket Pancakes
Twitter: @TheClayPigeon
Facebook: https://www.facebook.com/The-Clay-Pigeon-166650013438181/
Instagram: https://www.instagram.com/theclaypigeon/
Shooting Locations

Canada:
Central British Columbia
Montreal, QC
Peterborough, ON
Southern Alberta
Vancouver, BC
Victoria, BC

United States:
Bellevue, WA
Boston, MA
Bozeman, MT
Monroe, LA
New Orleans, LA
New York, NY
Northern California
Pismo Beach, CA
Portland, OR
Republic, WA
Sacramento, CA
Salt Lake City, UT
San Jose, CA
Santa Monica, CA
Seattle, WA
Washington, D.C.

International:
Ermelo, The Netherlands
Limpopo Province, South Africa
Oaxaca, Mexico
Phnom Penh, Cambodia
San Luis Potosí, Mexico
Siem Reap, Cambodia
Tlaxcala, Mexico
Wageningen, The Netherlands
Zapotitlán Salinas, Mexico
Key Interviewee Bios

JACK ARMSTRONG, OWNER
ARMSTRONG’S CRICKET FARM (WEST MONROE, LA)
A family business since 1947, several generations of Armstrongs have farmed crickets, mostly for fishing and feed. Recently, they have been seeing a shift in their business, to crickets for human consumption.

DAVY BLOUZARD, OWNER
BUGS CAFE (SIEM REAP, CAMBODIA)
Bugs Cafe serves sophisticated and appealing tapas, cooked in a fusion of French and Khmer cuisine. Crickets, scorpions, grasshoppers, ants, bees, silkworms, spiders and more, combined with Khmer and western seasonings, brings you a delicious and unparalleled taste adventure. They use no battery farming, and their food has low environmental impact, a fantastic protein input. They also support local Khmer insect harvesters/farmers.

ANDREW BRENTANO, CO-FOUNDER
TINY FARMS (SAN LEANDRO, CA)
Tiny farms provide people with insect farming starter kits and all of the knowledge they need in order to start raising their own insects for food.

FLORENCE MASHAU, GRASSHOPPER HARVESTER
VENDA, SOUTH AFRICA
“Mama” Florence (as she is known locally) of South Africa’s Venda tribe has been harvesting and eating grasshoppers, locusts, mopane worms, bee larvae, and termites for her entire life. She was originally taught by her grandmother. She continues to harvest them for herself, her family, and to sell at the local market. She is jovial and healthy, and is quick to point out that she looks much younger than her age.

Taking great time, patience, and speed, Mama Florence uses a swatch of branches to scare grasshoppers from the tall grasses – carefully cupping them in her hands and collecting them in a jar. To prepare them for cooking, she removes the unwanted hind legs, wings, and stomach, and lightly fries them on an open fire.

PAT CROWLEY, FOUNDER
CHAPUL
SALT LAKE CITY, UTAH
Chapul founder Pat Crowley is a passionate advocate for sustainability. After years of trying to support water conservation through regulation and legislation, he made the leap to crickets. Crowley successfully pitched his cricket protein bars on the ABC series Shark Tank, where celebrity investor Mark Cuban (owner of the Dallas Mavericks, Landmark Theatres, and Magnolia Pictures) invested $50,000 for a 10% stake in the company.

LAURA D’ASARO, CO-FOUNDER
SIX FOODS, CHIRPS CHIPS (BOSTON, MA)
Six Foods is a startup company run by three Harvard graduates. The three young women set a Kickstarter goal of $30,000 in order to get their cricket chips (called Chirps) and chocolate chirp cookies on the market. They ultimately raised over $70,000 and have now released three flavours: Sea Salt, Hickory BBQ, and Aged Cheddar.

DR. FLORENCE DUNKEL, ASSOCIATE PROFESSOR, Ph.D
MONTANA STATE UNIVERSITY (BOZEMAN, MT)
Dr. Dunkel is an Associate Professor of Entomology in the Department of Plant Sciences and Plant Pathology, Montana State University -- Bozeman (MSU -- Bozeman) with a Ph. D., M.S. and B.S. from the University of Wisconsin -- Madison. Her research focuses on plant-based natural products for insect management, particularly related to post-harvest ecosystems worldwide.

Florence’s current research products include use of natural products in the holistic management of grasshoppers in Montana and of malaria in West African (Malian) villages. Food insects and an insect feast have been part of her curriculum in Entomology for 28 years after a tasty introduction to sautéed brown locusts while working in Rwanda.
DARREN GOLDIN, CRICKET FARMER/OWNER
ENTOMO FARMS (PETERBOROUGH, CANADA)
Entomo Farms is the current leader in a race to bring insect food products to North American shelves. Having had an insect feed business infrastructure already in place, Darren Goldin and his brothers Jarrod and Ryan recently expanded into insect food for humans. Today, they are the continent’s largest producer of insects for human consumption. The South African born Goldins, draw some inspiration from cultures in their homeland -- where eating insects is normal for many people.

DAVID GEORGE GORDON, CHEF/AUTHOR
THE BUG CHEF (SEATTLE, WA)
David George Gordon is the award-winning author of The Eat-a-Bug Cookbook and 18 other titles about orcas and gray whales, cockroaches, tarantulas, land snails and the Sasquatch. The New York Times called his Field Guide to the Slug “gripping.”

He’s been featured in The Wall Street Journal and USA Today, Time magazine and National Geographic Kids and appeared on Conan O’Brien, The Wil Wheaton Project, The View, and The Late Late Show with James Corden. He’s spoken at the American Museum of Natural History, San Diego Zoo, California Academy of Sciences, San Francisco Botanical Garden, MASS MoCA and many other venues.

As the Bug Chef, he’s shared his exotic cuisine with visitors to the Smithsonian Institution, Robert Mondavi Institute for Food and Wine Science, San Diego Comic Con, Singapore Food Festival, Yale University and Ripley’s Believe It or Not! museums in Hollywood, San Francisco and Times Square.

Chef Gordon prepared food for the famed Explorer’s Club banquet in 2015, where he served grasshopper skewers and blowtorched tarantulas to NYC’s elite.

MARIEKE CALIS
KRECA (ERMELO, THE NETHERLANDS)
Established in 1978, Kreca is Europe’s leading insect farm, using sustainable environmental practices in raising insects for animal feed. With years of knowledge of breeding many different insect species, Kreca is now working towards a solution for one of the world’s biggest challenges. They are now authorized to breed insects for human consumption. Kreca is involved in a project in Kenya and Uganda where they teach the local population how to rear insects for their own consumption. Kreca’s mission is to bring tasty insect-derived protein products to the world in a sustainable manner.

GABI LEWIS, EXO
BROOKLYN, NY
Two Brown University roommates in their twenties raised $54,000 on Kickstarter (with just a $20,000 goal) to make and sell cricket protein bars. They used a Michelin-starred chef from the Fat Duck Restaurant in England to design the recipes. The insect protein bars have been so popular that they’re already expanding the line to include more flavours, including Cacao Nut, Peanut Butter and Jelly, and Cashew Ginger.

GABE MOTT, COO
ASPIRE FOOD GROUP (OAXACA, MEXICO / AUSTIN, TX)
Gabe Mott is part of the Canadian team of five from McGill University who co-founded the company Aspire. Their business aims to increase production of insect food proteins, with an initial target market of urban slums in Mexico, Ghana, Kenya, and Thailand. Out of 11,000 applications from 350 universities and colleges around the world, the Aspire team won the prestigious Hult Prize in 2013. Former President Bill Clinton awarded the one million dollar prize, remarking: “in recognition of a remarkable social enterprise with the potential to solve global food insecurity.”

Aspire has developed innovative portable farming technologies that permit year-round farming of chapulines in Mexico. This project aims to increase the availability of chapulines in the market thereby decreasing the price considerably. This should ultimately increase access of the insects to the poor, who need them the most. Aspire opened a farm in Austin, Texas in 2015, with the ultimate goal of making insect-fortified flours, snacks, and proteins widely available in North America.
SONNY RAMASWAMY, DIRECTOR
NATIONAL INSTITUTE OF FOOD AND AGRICULTURE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.
Ramaswamy attended the University of Agricultural Sciences, Bangalore and earned a Bachelor of Science in Agriculture in 1973 and a Master of Science (Agriculture) in agricultural entomology in 1976. He then earned his Ph.D. in Entomology from Rutgers University. He completed the executive Management Development Program from Harvard University in 2001.

From 1997 to 2006 Ramaswamy was head of the Department of Entomology at Kansas State University, where he held the title of Distinguished Professor. He was then the Associate Dean of Purdue University College of Agriculture and directed the University's agricultural research programs from 2006 to 2009.

In 2009, Ramaswamy was appointed as the Dean of the College of Agricultural Sciences at Oregon State University and Director of the Oregon Agricultural Experiment Station. On March 2012, President Barack Obama announced his intention to appoint Ramaswamy as Director of the U.S. Department of Agriculture’s (USDA) National Institute of Food and Agriculture.

ARNOLD VAN HUIS (PROFESSOR, AUTHOR OF UN REPORT “EDIBLE INSECTS”) WAGENIENEN UNIVERSITY (WAGENINGEN, THE NETHERLANDS)
Arnold van Huis is the Professor of Tropical Entomology at Wageningen University in The Netherlands. His research concentrates on the human consumption of insects. Previously, he has worked in Nicaragua for the Food and Agricultural Organization (FAO) of the United Nations on integrated pest management in food grains, and on regional crop protection for eight African countries.

Van Huis also coordinates a project called “Sustainable Production of Insect Proteins for Human Consumption”. This project investigates the potential of the sustainable production of high quality edible insect proteins, from organic waste. He also serves as a consultant to FAO on insects as food and feed. He is the co-author of the FAO book “Edible Insects: Future Prospects for Food and Feed Security” (2013). A mere twenty-four hours after the launch of the book, they had 2.3 million downloads. Four months later, that number grew to over six million. The book has been so popular that it has been translated into Korean, French, and Chinese.

Doctor Van Huis also co-authored The Insect Cookbook: Food for a Sustainable Planet, released in early 2014. He believes that widespread acceptance of insects as food is only a matter of educating the public about their nutritional value.

VIKRAM VIG, CO-OWNER/CHEF/ENTREPRENEUR MEERUL DHALWALA, CO-OWNER/CHEF/AUTHOR VIG'S RESTAURANT (VANCOUVER, BC)
The owners of the famed Indian restaurant Vij's were among the first in Canada to test insect protein on their menu. Vikram Vig is an Indian-born Canadian chef, cookbook author, and television personality. He is co-owner, with Meeru Dhalwala, of the Indian cuisine restaurants Vij's Restaurant and Rangoli Restaurant in Vancouver. He also owns My Shanti, a restaurant in Surrey and Vij's Railway Express, a food truck on the streets of downtown Vancouver. In 2014, Vij appeared as one of the new “dragon” investors on the ninth season of the Canadian reality show Dragons’ Den.

Vig’s Inspired Indian Cuisine product line is sold in grocery stores across Canada. Vikram and Meeru are co-authors of two award-winning cookbooks. In 2003, The New York Times praised Vij's Restaurant as “easily among the finest Indian restaurants in the world.”

Meeru Dhalwala wants to take advantage of cricket flour’s high levels of protein and iron and its nutty flavour, by incorporating it into her paratha flatbread. Meeru tells us “using insects must be more than a novelty – it has to taste good.”
Story Lines and Production Notes

THE FILM, PRODUCERS, AND FILMMAKERS
Bugs on the Menu was shot on four continents over two years by Gemini Award-winning Director/Producer/DOP Ian Toews csc.

291 Film Company and producers Ian Toews and Mark Bradley are based in beautiful Victoria, BC, Canada.

Previous productions of 291 Film Company include the Gemini Award winning arts series Landscape as Muse (Bravo!, Knowledge, SCN), Canadian Screen Award-nominated wild food series Untamed Gourmet (APTN, SCN), and nature documentaries Saskatchewan River Delta (Oasis HD, SCN) and Grasslands (Oasis HD, City).

The theatrical world premiere of Bugs on the Menu was on May 6, 2016 at NORTHWESTFEST in Edmonton, AB, Canada. NORTHWESTFEST is the longest running non-fiction film festival in Canada (formerly called Global Visions). The documentary was nominated for the MADE IN CANADA FEATURE award at the festival.

THE WEBSITE
For the companion Bugs on the Menu website, the producers challenged a variety of chefs to create dishes with insect ingredients. The resulting recipes can be tried by anyone at www.bugsonthemenu.com. They can also share pictures of their results over social media by tagging their pictures with #bugsonthemenu

The producers approached six Victoria, BC restaurants to put actual bug dishes on their menus in May 2016. This resulted in an historic event where there were six restaurants in one city at the same time, serving insect protein. That has not happened before, anywhere!

The Bugs on the Menu website was created by Emmy Award winning Secret Location from Toronto. Website photography is by Victoria-based food stylist and photographer Rebecca Wellman. The 19 webisodes were filmed by Ian Toews csc, of Victoria-based 291 Film Company.

ENTOMOPHAGY
2 billion people worldwide already consume insects as a part of their regular diet.

Insects already are part of our western diets—we just don’t know it. There are insect fragments in chocolate, coffee, beer.

While not all insects are edible, there are an estimated 1900 edible species worldwide.

Seattle’s David George Gordon (aka: ‘The Bug Chef’) has been trying to convince people to eat bugs for over two decades.

CRICKET FARMING
Cricket farming takes shockingly less land, water, and feed than traditional proteins, like chicken, pigs, and cows.

One pound of cricket protein can be raised from a mere 4.73 litres of water. Compare that with 3,569 litres for one pound of chicken protein, 4,947 litres for pigs, and whopping 17,481 litres for cows!
Crickets can be farmed vertically, allowing cricket farms to take up less land space. They can also be farmed indoors, year round.

Crickets can be raised on grocery store leftovers, keeping precious “expired” food out of landfills.

Crickets have 20 times more B12 than beef, more calcium than milk, and more iron than spinach.

Crickets contain all 9 Essential Amino Acids for building and repairing muscles, low in saturated fat, and high in prebiotic fibre.

The Goldin brothers grew their cricket farming business Entomo Farms from 5,000 to 60,000 square feet in a mere 24 months, solely out of demand for its edible insects.

Crate powder (sometimes called cricket flour) can be added as a supplement to baking. It does not contain the same gluten properties of regular flour, but it can provide a protein boost to your baking.

INSECT PROTEIN COMPANIES & RESTAURANTS
Salt Lake City’s Pat Crowley made a deal for his Chapul cricket protein bars with celebrity investor Mark Cuban on ABC’s Shark Tank.

The business Six Foods and their ‘Chirps’ cricket chips were created by three female Harvard graduates.

Vancouver’s famed Vij’s was one of the first western restaurants to put bugs on its menu back in 2011.

In 2013, Aspire Food Group won the one million dollar Hult Prize, presented by President Bill Clinton “in recognition of a remarkable social enterprise with the potential to solve global food insecurity.”

American fast food chain Wayback Burgers started their Cricket Milkshake as an April Fools’ joke. It was so popular that they decided to put it on their menu as a regular item.

The co-founders of eXo started working on their business idea for cricket protein bars with an initial shipment of 2,000 live crickets, delivered to their Brown University dorm room.

EXPERTS
USDA’s Sonny Ramaswamy, featured in #bugsonthemenu, was appointed by none other than President Barack Obama to serve as director of the National Institute of Food and Agriculture.

Dr. Arnold van Huis of The Netherlands’ Wageningen University, was the lead author of the UN report “Edible Insects: Future Prospects for Food and Feed Security” (2013). It is available for free and has been downloaded over seven million times!
Crew Bios

Ian Toews csc, Director / Producer / DOP
Ian Toews csc, has been making films and videos since 1996. His works are primarily concerned with the natural environment and often, its degradation. He is the producer, director, and DOP of 7 short films, more than 60 television episodes, and 5 full-length documentaries, including (Canadian TV's top honour) Gemini Award winning arts and nature series Landscape as Muse. Ian Toews csc, is a full member of the Canadian Society of Cinematographers.

Mark Bradley, Producer
Mark Bradley has worked in the film and television industry since 1998. At 291 Film Company, he produces documentaries and series. Projects include the Gemini Award-winning Landscape as Muse (Bravo!, SCN, Knowledge), Canadian Screen Award-nominated Untamed Gourmet (APTN, SCN) and Grasslands (Oasis, City). Mark also created and produced the first season of Great Minds of Design (documentary Channel), which broadcasts in more than 25 countries.

Jason Nielsen, Editor
Jason Nielsen is an accomplished picture editor and writer who has worked on a variety of award winning productions, including thirty-eight episodes of 291 Film Company’s Landscape as Muse. Jason was recognized with a Gemini Award nomination for Best Picture Editing (2004) and is the recipient of various Directors Guild of Canada Awards.

Brendan Ostrander and Darren Phillips, Original Score
Brendan Ostrander is a musician, producer, and composer who has performed, recorded, and toured with a wide variety of internationally recognized artists including The Be Good Tanyas, Daniel Powter, Gene Simmons, Carole Pope, John Wozniak (Marcy’s Playground), and The Northern Pikes. In addition, Ostrander has an extensive background in engineering and audio postproduction, including sound design and re-recording mixing for film and television. In 1994, Ostrander and Darren Phillips helped form the seminal west coast ambient/electronic group, hellenkeller.
Final Credits

291 Film Company presents

Bugs on the Menu

in association with
documentary Channel

Commissioning Editor
BRUCE COWLEY

Producers
MARK BRADLEY
IAN TOEWS

Director
IAN TOEWS

Picture Editor
JASON NIELSEN

Director of Photography
IAN TOEWS csc

Writers
MARK BRADLEY
JASON NIELSEN
IAN TOEWS

Original Score
BRENDAN OSTRANDER
DARREN PHILLIPS

Featuring
DR. LUIS TARANGO ARAMBULA
JACK ARMSTRONG
DAVY BLOUZARD
ANDREW BRENTANO
ROY BURGMAN
MARIEKE CALIS
WARREN CARTER
PAT CROWLEY
LAURA D’ASARO
MEERU DHALWALA
DR. FLORENCE DUNKEL
DARREN GOLDIN
DAVID GEORGE GORDON
JACK GRIFFITH
JASON HOLLEY
DOREEN KETCHENS
DR. JULIE J. LESNIK
GABI LEWIS
PHILIP MALULEKE
FLORENCE MASHAU
GABE MOTT
ALAN NICHOLS
SONNY RAMASWAMY
LIN SEYNAVE
DR. ARNOLD VAN HUIS
VIKRAM VIJ
VI WAI
WAT WAI
YEM WAI
SARAH WILSON
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CAM KOROLUK
ANDREW NAYSMITH

Grips
TIM CHAPIN
DEREK RYAN

Drivers
MAK MOEUN
SALVADOR ALVAREZ RIO

Still Photography
MARK BRADLEY
CAM KOROLUK
ANDREW NAYSMITH
AMY WALKER
REBECCA WELLMAN

On-line Facilities
291 FILM COMPANY
SIDE STREET POST

For 291 Film Company
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Graphics and Compositing: JASON BRITSKI

For Side Street Post
Colourist: GARY SHAW
Online Editor: KEVIN REID
Facility Technical Director: BARRY LIU
Facility Supervisor: NANCY SHAW
Facility Coordinator: EVA ZAWALAK

Visual Effects and Motion Graphics
GLOO STUDIOS
VFX Supervisor: MIKE RITCHIE
VFX Producer: PAUL LOWEY
Senior VFX Artist: ANITA KWAN
VFX Artist: CAM SLUSAR
Motion Graphics Artist: TIANLUNG JIANG

Bugs on the Menu Logo Design
SECRET LOCATION

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DAVID J. TAYLOR

Music Editor
JASON NIELSEN

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Sound Supervisor / Re-recording Mixer: BILL SHEPPARD
Technical Manager / Re-recording Mixer: GORDON SPROULE
Sound EFX Editor: PAT HASKILL

TWISTED PAIR PRODUCTIONS
Sound Design / Final Surround Mix: CARY CIESIELSKI

Original Score Composers and Performers
BRENDAN OSTRANDER
DARREN PHILLIPS
Performed with
OSMOND CHIU
LIZZY MUNSON
NATALIE WIEBE

Recording Engineers
DARCY MUNSON
BRENDAN OSTRANDER

Music
“Playground Hustle”
Performed by The Dø
Courtesy of Six Degrees Records
By Arrangement with Primary Wave Music

“And Now...”
by Micro Productions
Courtesy Premium Beat

“Face the Music”
Performed by Paul Marshall Keeling
Composer: Paul Marshall Keeling
From the album “Ancient Lights”
© 2014, Paul Marshall Keeling

“Transition”
Performed by Paul Marshall Keeling
Composer: Paul Marshall Keeling
From the album “Ancient Lights”
© 2014, Paul Marshall Keeling

Live Jazz Solo, New Orleans
Performed by Doreen Ketchens
© 2015, Doreen’s Jazz New Orleans

“My Guarantee”
Performed by Rah Rah
Composers: Marshal Burns, Kristina Hedlund, Erin Passmore, Joel Passmore, Samra Sahlu
From the album “Going Steady”
© 2008, Rah Rah Band Inc.

Tchaikovsky - Waltz of the Flowers (from the Nutcracker Suite)
by Leo Symphony Orchestra
Courtesy Premium Beat

Stock Footage
“Marcel Dicke: Why not eat insects?”
Courtesy TED

“The View”
Courtesy of American Broadcasting Companies, Inc.

“Shark Tank”
Courtesy Sony Pictures Television

“Six Foods Kickstarter Video”
Courtesy Daniel Garber, Alex Morelli, and Isabelle Link-Levy

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MARK BRADLEY

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AMY WALKER
Consulting
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CAJUN ENCOUNTERS
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GUADALUPE HERNANDEZ OLIVARES
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SALVADOR ALVAREZ RIO
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TOKO TOMITA
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