

Media Coverage

2nd Quarterly Review

(Jan – March 2014)



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1) Overview

During this quarter, a total of 123 media pieces concerning the use of insects in feed and food were identified. The majority consisted of articles written online, however, a smaller number of television reports and videos were also found. PROteINSECT was mentioned in 11 articles, a figure much lower than the 48 observed in the previous quarter. These articles mostly appeared on specialist websites aimed at those in the feed or livestock industries, although several articles on PROteINSECT were aimed at more general audiences.

The media coverage was mostly positive (41.5%) or neutral (56.1%) in tone when discussing insects as a food or feed ingredient. Again, many articles highlighted the environmental and nutritional benefits associated with entomophagy. Only 3 articles, accounting for 2.4%, presented the topic in a negative tone. Two of these articles expressed doubt that there is a food scarcity issue, and thus a need for insect protein, whilst the other described insect snacks as unappealing.

With regards to the subject matter of the media coverage, 81.3% was focused on the idea of insects being used as food for human consumption whereas only 16.3% discussed the potential of insect protein in animal feed. The remaining 2.4% of media coverage referenced insects as both a food and feed source. Furthermore, 78.9% of media coverage was aimed at the general public, whilst only 21.1% was aimed at a specialist audience – typically those working in the food or agriculture sectors.

As found in the previous quarter, media coverage on the use of insects in food and feed came from sources all around the world. Overall, 17.9% of pieces came from international media outlets. The USA was responsible for the highest amount of coverage with 39%, whist 15.4% of coverage came from UK sources. A smaller proportion of identified articles, accounting for between 4.9% and 0.8% each, came from sources based in the following countries: China, Canada, France, India, Australia, Spain, Belgium, Zimbabwe, Nepal, Switzerland, Ireland, Uganda, Indonesia, Thailand, Chile, Russia, Slovakia and Vietnam.

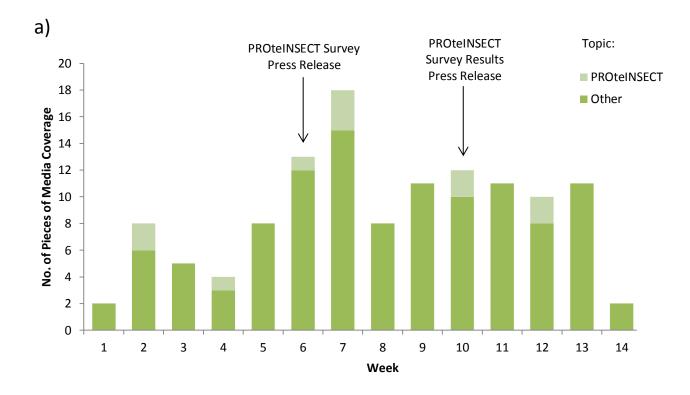
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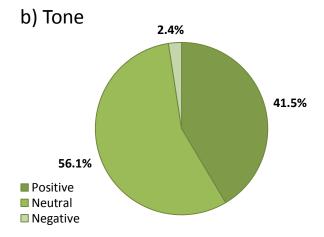
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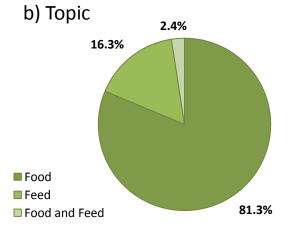
		This Quarter	Last Quarter
General	No. of articles	123	141
	No. of articles about PROteINSECT	11	48
Tone	Positive	41.5%	67.4%
	Neutral	56.1%	31.9%
	Negative	2.4%	0.7%
Торіс	Food	81.3%	50.4%
	Feed	16.3%	49.6%
	Food and Feed	2.4%	0%
Audience	General	78.9%	58.9%
	Specialist	21.1%	41.1%



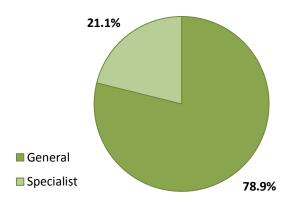


2) Supporting Figures

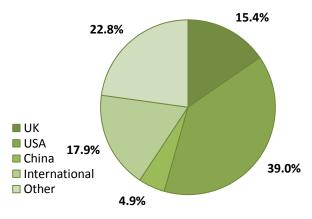




d) Audience



e) Source Country





3) Monthly Highlights

January:

Notable pieces of media coverage identified in January include a Sky News TV report featuring an interview with founders of the UK edible insect company ENTO. The point is raised that in order to reach a wider audience, ENTO will have to overcome several production and legislation issues. Additionally, members of the public are asked how they would feel about eating insects and the response is largely positive.

January		
General	No. of articles	27
	No. of articles about PROteINSECT	3
Tone	Positive	40.7%
	Neutral	55.6%
	Negative	3.7%
Торіс	Food	74.1%
	Feed	25.9%
Audience	General	77.8%
	Specialist	22.2%

Another highlight was a three-page article in the

industry magazine Aquafeed International, authored by Brad Marchant, the CEO of Enterra Feed Corporation. In the article, Marchant explains the process whereby black soldier fly larvae are converted into fish feed. There is a particular emphasis on how this is a 'zero waste system' due to flies being reared on food waste and remaining fly digestate being used as a soil conditioner.

February:

A major highlight in February was the story that a team at London Southbank University have used 3D printing technology to create edible insect snacks as they believe this could be a way to make consumers more accepting. This story was the subject of 8 articles from both UK and USA news sources.

Additionally, several American sources published interviews with Daniella Martin, who is the author of an edible insect recipe book and is trying to

February		
General	No. of articles	50
	No. of articles about PROteINSECT	4
Tone	Positive	36%
	Neutral	60%
	Negative	4%
Торіс	Food	88%
	Feed	12%
Audience	General	80%
	Specialist	20%

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promote the idea of entomophagy to a wider audience. Chapul energy bars made out of cricket flour were also a popular topic. In the middle of the month PROteINSECT sent out a press release to encourage the public to share their views on insect protein in feed and food by completing an online survey. This release was only found to have been picked up by CommNet, an EU bioeconomy research network.

March:

In the month of March, a popular topic covered by the media was that a team of scientists in India have started studying the insect diet of the Bodo tribe to help investigate the feasibility of entomophagy on a wider scale. A point repeatedly made was that India's cultural association of insects with certain caste taboos makes it unlikely that insect consumption will become popular in the country in the near future.

March		
General	No. of articles	46
	No. of articles about PROteINSECT	4
Tone	Positive	47.8%
	Neutral	52.2%
	Negative	0%
Торіс	Food	78.3%
	Feed	15.2%
	Food and Feed	6.5%
Audience	General	78.3%
	Specialist	21.7%

Towards the start of March, PROteINSECT released a

press release that gave out preliminary results of the online survey. This release was picked up by the national newspaper *The Irish Times.* The article discussed the positive response from the public about the idea of insect protein in animal feed. Additionally, a spokesperson from the FAO said that in blind-tastings, the public preferred meatballs containing insect protein.

A couple of French media outlets ran articles about French chef, David Faure, losing his Michelin star. The chef believed that his edible insect themed menu was to blame for this as others have told him that insects do not fit in with the criteria of French gastronomy. Nevertheless, he plans to continue serving insects and promoting the idea of insects as food.

Finally, a major story this month was that the UK's Soil Association is launching a project designed to increase insect consumption by free-range laying hens. The plan is to place live mealworms on the range and then analyse egg quality. This story was found on specialist news sites aimed at farmers and those in the animal feed industry.



4) Summaries of Media Coverage

1) **Source:** International Aquafeed, Aquaculture industry magazine (specialist audience), Jan/Feb 2014

Title: Closing the food waste loop: a new angle for insect-based feedsLink: http://www.slideshare.net/IntAquafeed/closing-the-food-waste-loop-a-new-angle-for-insectbased-feeds

Summary of content:

- Positive tone
- Article written by Brad Marchant, CEO of Enterra Feed Corporation.
- Focus on the black soldier fly fed on pre-consumer food waste for fish feed.
- Enterra's scientists have successfully domesticated and commercialised the species' life cycle on a variety of food waste sources, which eliminates the reliance on wild populations of black soldier fly.
- The protein profile of the grown larvae is not dependent on feed mix, but that the fatty acid profile is more dependent on the feedstock used.
- With a ban on food waste into Metro Vancouver landfills coming into effect in 2015, regional food retailers, distributors and producers are welcoming the opportunity to support Enterra's renewable food system.

Contact details: Prof. Simon Davies (editor) = <u>simond@aquafeed.co.uk</u>

2) **Source:** Edible Baja Arizona, Tuscon food magazine (general audience), Jan/Feb 2014 **Title:** *Don't Bug Me*

Link: http://www.ediblebajaarizona.com/dont-bug-me/

Summary of content:

- Neutral tone
- Insect eating will become a familiar media topic.
- Insects have a serious image problem; we are conditioned to reach for the insecticide.
- Features comments from the founders of Chapul cricket energy bars and Little Herds.
- Try to get rich people to eat insects. It worked with lobster. **Contact details:** <u>info@EdibleBajaArizona.com</u>
- 3) Source: The Daily Beast, USA news and opinion site (general audience), 4/1/2014 Title: Camel in a Can and 6 More Weird Canned Meats Link: <u>http://www.thedailybeast.com/articles/2014/01/05/camel-in-a-can-and-6-more-weird-canned-meats.html</u>

Summary of content:

- Neutral tone



- A list of 'bizarre' animal products you can buy in a can.
- Includes smoky BBQ-roasted scorpions and bamboo worms which taste like cornpuff snacks.
- 'We're supposed to be saving the world by eating insects now' **Contact details:** <u>editorial@thedailybeast.com</u>
- Source: The Daily Monitor, leading Ugandan newspaper (general audience), 5/1/2014

Title: Ugandans' insect menu beyond the nsenene delicacy Link: <u>http://www.monitor.co.ug/Magazines/Life/Ugandans--insect-menu-beyond-</u> <u>the-nsenene-delicacy/-/689856/2134294/-/item/2/-/309uxv/-/index.html</u>

Summary of content:

- Positive tone
- In Uganda, nsenene (grasshoppers) are a common snack, available at markets and in supermarkets, considered a universal delicacy.
- Different ethnicities have their own less common insect delicacies.
- Information is given on how white ants, dragonflies, bee larvae and edible beetles are harvested, processed and prepared.

Contact details: David Mafabi = <u>dmafabi@ug.nationmedia.com</u>

5) **Source:** The Voice of Russia (general audience), 6/1/2014

Title: Can insects save from hunger?

Link: <u>http://voiceofrussia.com/news/2014_01_06/Can-insects-save-from-hunger-</u>0773/

Summary of content:

- Negative tone
- Describes UN's "advice" that people should consider eating insects (and other non-traditional foods) to relieve predicted World-wide food crisis.
- Article leans towards view that traditional foods are currently in surplus production and that eating insects is mainly resorted to by those living in famine conditions.

Contact details: Maria Balyabina (journalist) = world@ruvr.ru

6) **Source:** Madrimasd, Spanish science and technology news site (specialist audience), 6/1/2014.

Title: The importance of insects to livestock production Link: <u>http://www.madrimasd.org/informacionidi/noticias/noticia.asp?id=58969</u> Summary of content:

- Positive tone
- An overview of the work of PROteINSECT, taken from CORDIS news.



Contact details:

http://www.madrimasd.org/SistemaMadrimasd/contacto/contactar/default.asp

7) **Source:** AgriPress, Agriculture, food and environment news site (specialist audience), 6/1/2014

Title: Insects approved for human consumption**Link:** http://www.agripressworld.com/start/artikel/516504/en

Summary of content:

- Positive tone
- Belgium's FASFC has published a list of ten insects now approved for human consumption, the first European country to do so.
- The EU is yet to come out with a clear position on eating insects.
- The list includes larvae of mealworms, superworms, the African grasshopper, American desert locust and specific subspecies of crickets and beetles.
- Retailers have to be registered with the FASFC and abide by all applicable rules concerning hygiene, traceability and labelling. There is currently only 1 licenced person.

Contact details: info@agripress.be

8) **Source:** The New York Times, USA newspaper (general audience), 6/1/2014 **Title:** *Energy Bars That Put a Chirp in Your Step*

Link: <u>http://www.nytimes.com/2014/01/08/dining/energy-bars-that-put-a-chirp-in-your-step.html?_r=0</u>

Summary of content:

- Neutral tone
- The story behind the company Exo, which manufactures protein bars made out of crickets.
- Crickets are roasted and blended into flour. Each bar contains 10g of protein and approximately 40 crickets.
- Flavour is important chef from the Fat Duck acted as a culinary advisor. The available flavours are cacao nut, peanut butter and jelly and cashew ginger.
- They aim to sell bars in natural food stores and at gyms. They are available online now.

Contact details: Sophie Brickman (journalist) = @sbrickman (twitter)

- 9) Source: Legal Weekly, Chinese legal news site (general audience), 7/1/2014
 Title: Voices of doubt in the "insect food"
 Link: <u>http://www.legalweekly.cn/index.php/Index/article/id/4328</u>
 Summary of content:
 - Neutral tone
 - The FAO report has sparked discussion on edible insects.



- In China, edible insect sales are relatively small and there is no explicit category for them in food production licences.
- Relevant food safety and hygiene standards are not clear, caution needs to be exercised.

Contact details: Ji Higashino (journalist), 010 -84,772,911 (editorial dept.)

10) **Source:** VILT, Flemish Agriculture industry info site (specialist audience), 9/1/2014 **Title:** *Get flying key role in protein transition?*

Link: http://www.vilt.be/krijgen vliegen sleutelrol in eiwittransitie

Summary of content:

- Neutral tone
- An overview of the work of PROteINSECT
- Mentions that the University of Leuven is responsible for the sustainability assessment.

Contact details: info@vilt.be

11) **Source:** Mental Floss, USA fact and trivia magazine site (general audience),

14/1/2014

Title: 6 Common Foods Re-Made With Bugs

Link: http://mentalfloss.com/article/54507/6-common-foods-re-made-bugs

Summary of content:

- Neutral tone
- A list of food items made with insects and a brief description.
- Includes cicada ice cream, mealworm nuggets and fries, chocolate covered ants, bug burgers and cicada pizzas.

Contact details: Mark Mancini, mentalfloss@emailcustomerservice.com

12) **Source:** Food Navigator, European food and beverage news site (specialist audience), 15/1/2014

Title: *Target the curious: Bringing insect consumption to the mainstream* **Link:** <u>http://www.foodnavigator.com/Financial-Industry/Target-the-curious-Bringing-insect-consumption-to-the-mainstream</u>

- Positive tone
- Entomologist Arnold van Huis suggests that when trying to introduce eating insects to the mainstream, target the 20-30% of people who sincerely want to try it, not those repulsed by the idea.
- In a blind taste test, the majority of people preferred meatballs containing 50% ground mealworm to normal meatballs.
- The first bite is always the greatest challenge.
- There are still legislative hurdles although the situation is slowly changing.



Contact details: Caroline Scott-Thomas (journalist) = <u>caroline.scottthomas@wrbm.com</u>

13) **Source:** My San Antonio, USA local news and entertainment site (general audience), 15/1/2014

Title: *Caterpillar Canapés, Anyone? Eating Insects An Answer for Hungry Planet* **Link:** <u>http://blog.mysanantonio.com/monikamaeckle/2014/01/caterpillar-canapes-</u> <u>anyone-eating-insects-an-answer-for-hungry-planet/</u>

Summary of content:

- Positive tone
- Why is there such a negative reaction to insects when they are everywhere, readily available, prolifically fertile and high in protein?
- Chapulines (grasshoppers) are not half bad with a beer.
- Data on the number of insect species eaten from the FAO report is given.
- Even if you can't imagine eating insects, you already are! The food supply is riddled with insects in all their stages. They are harmless.

Contact details: Monika Maeckle = <u>butterflybeat@gmail.com</u>

14) **Source:** Economic Information Daily, Chinese newspaper (general audience), 17/1/2014

Title: Special French restaurant open eat insects

Link: http://jjckb.xinhuanet.com/invest/2014-01/17/content 487784.htm

Summary of content:

- Neutral tone
- Several French chefs are serving dishes featuring edible insects.
- The FAO report is referenced.
- Insect rearing is yet to break through technical difficulties.
- Legal gaps and consumer acceptance are also challenges.

Contact details: Huang Min (author), 86-10-63073586

15) Source: National Public Radio, USA radio report & blog (general audience),

17/1/2014

Title: The Katydid Dilemma: Will You Eat Insects? Link: <u>http://www.npr.org/blogs/13.7/2014/01/14/262491723/the-katydid-dilemma-</u>will-you-eat-insects

- Neutral tone
- Insects are the 'new darlings of the avant-garde food world'.
- In other parts of the world eating insects is an everyday thing. Ugandan villagers are very selective about the insects they eat and have a detailed knowledge of insect behaviour.



Insects pack a nutritional punch but will the catch on? Readers are asked to comment on whether they would eat insects. The answers are very mixed.
 Contact details: Barbara J. King = <u>http://www.barbarajking.com/contact.htm</u>

16) Source: Sky News, UK TV news channel (general audience), 21/1/2014
Title: Bugs: Coming To A Supermarket Near You?
Link: <u>http://news.sky.com/story/1196277/bugs-coming-to-a-supermarket-near-you</u>
Summary of content:

- Positive tone
- Short video featuring an interview with the founders of Ento.
- They are facing difficulty marketing to product to a wider audience and are having to navigate legal and production issues.
- A vox pop is carried out and people seem supportive of the idea.
- In the accompanying text, Peter Smithers talks about the sustainability of insects.
 Contact details: news.plan@bskyb.com

17) **Source:** Sinar Tani, Indonesian agriculture industry news site (specialist audience), 22/1/2014

Title: Insect Protein for Feed and Food

Link: http://m.tabloidsinartani.com/index.php?id=148&tx_ttnews%5Btt_news%5D=4 49&cHash=a5afde87dcb353d9f399460b51c4b74f

Summary of content:

- Neutral tone
- Short overview of the work of PROteINSECT

Contact details: sintani@cbn.net.id

18) Source: CCTV-7, Chinese state broadcaster (general audience), 22/1/2014

Title: Tenebrio breeding techniques

Link: <u>http://sannong.cntv.cn/program/nongguangtd/20140123/102080.shtml</u> Summary of content:

- Positive tone
- Video explaining tenebrio (mealworm) breeding techniques.
- Hope that viewers find entrepreneurial inspiration

Contact details:

http://www.cctv.com/program/20110130/column_header/index.shtml

19) Source: Pet MD, Pet health website (general audience), 23/1/2014
 Title: Insects: The Pet Food Protein of the Future?
 Link: http://www.petmd.com/blogs/thedailyvet/ken-tudor/2014/january/insects-

pet-food-protein-future-31265



- Positive tone
- Article makes the case for insect protein in foods.
- Lists the following benefits: greater efficiency, nutritional, lack of animal welfare issues, reduced transmission of zoonotic disease.
- Feeding insects to pets is not a new idea. Reptile and bird owners already practice this.

Contact details: http://www.petmd.com/contact

20) **Source:** My San Antonio, USA local news and entertainment site (general audience), 26/1/2014

Title: Austin Nonprofit aims to Make Eating Insects Cool for Kids Link: <u>http://blog.mysanantonio.com/monikamaeckle/2014/01/austin-nonprofit-aims-to-make-eating-insects-cool-for-kids/</u>

Summary of content:

- Neutral tone
- Interview with Robert Nathan Allen, founder of Little Herds, North America's first charity dedicated to promoting the eating of insects.
- "Kids are the key" since they don't have the hang-ups of their parents and think eating bugs is cool.
- Little Herds hold public events to promote entomophagy.
- Businesses need help in developing rules and standards for growing human consumption-grade insects.

Contact details: Monika Maeckle = <u>butterflybeat@gmail.com</u>

21) Source: Birmingham Mail, UK local news site (general audience), 28/1/2014
 Title: Thrills and spills of science come alive at Big Bang Fair
 Link: <u>http://www.birminghammail.co.uk/whats-on/family-kids-news/big-bang-fair-birmingham-nec-6638697</u>

Summary of content:

- Neutral tone
- The NEC arena in Birmingham is hosting the Big Bang Fair, celebration of science and engineering for young people.
- The fair will be featuring edible insects.

Contact details: David Brookes (editor) = <u>David.Brookes@trinitymirror.com</u>

22) Source: The Nation, Thai newspaper site (general audience), 28/1/2014

Title: Ready for the crunch? Link: <u>http://www.nationmultimedia.com/life/Ready-for-the-crunch-30225358.html</u> Summary of content:

Neutral tone



- Focused on the French insect breeding company Micronutris, the first in Europe to breed insects for human consumption.
- The founder, Cedric Auriol, was inspired by the FAO.
- The insects feed on wheat flour, barley, fruit and vegetables.
- Auriol has a partner who is the first Michelin-star-ranked chef to offer insect dishes on his menu.
- In the future, the emphasis will be on manufacturing powders and pastes, to be used for example in biscuits or cereal bars.

Contact details: editor@nationgroup.com

23) Source: This is Chile, Chilean Lifestyle site (general audience), 29/1/2012
 Title: Chilean salmon to enjoy a healthier, more natural diet
 Link: <u>http://www.thisischile.cl/9111/2/chilean-salmon-to-enjoy-a-healthier-more-natural-diet/News.aspx</u>

Summary of content:

- Neutral tone
- Chile is the second biggest producer of salmon in the world and is looking into using insect-based salmon feed.
- This feed would replicate the natural feeding habits of fingerling salmon.
- Production testing is due to start during the first half of 2014. By the end of 2014, feeding tests are planned and industry application pencilled in for 2015.
- US\$400,000 has been raised through public funding from the Foundation for Agrarian Innovation and private investment from Denmark-based fish feed supplier Biomar.

Contact details: imagendechile@imagendechile.cl

24) **Source:** Fine Dining Lovers, Online food magazine (general audience), 29/1/2014 **Title:** *Eating Insects, France's Rising Trend*

Link: <u>http://www.finedininglovers.com/stories/eating-insects-france-chefs/</u>

Summary of content:

- Neutral tone
- Eating insects is becoming a rising trend in France, 'the French press can't stop talking about it'.
- Michelin star chefs are serving insects (crickets, grasshoppers, mealworms, scorpions) in their restaurants.
- France has the first company that cultivates insects for culinary purposes.
- FAO report is referenced.

Contact details: press@finedininglovers.com

25) **Source:** news.com.au, Australian news site (general audience), 30/1/2014 **Title:** *Insect cuisine a new trend in eating*



Link: <u>http://www.news.com.au/national/victoria/insect-cusisine-a-new-trend-in-</u>eating/story-fnii5sms-1226814228029

Summary of content:

- Neutral tone
- A restaurant in Victoria is serving dishes including scorpions, silk worms, ants and cockroaches.
- They are more accepted by younger diners who responded better to food trends because they were more socially connected.
- Edible Bug Shop owner Skye Blackburn said she was now supplying insects to more than 15 restaurants across Australia.

Contact details: aaron.langmaid@news.com.au

26) **Source:** News Works, USA local news site (general audience), 30/1/2014

Title: *Philly makes room at the table: Edible insects and grasshopper tacos* **Link:** <u>http://www.newsworks.org/index.php/local/item/64335-where-to-find-the-tasty-bugs-in-philadelphia</u>

Summary of content:

- Positive tone
- Edible insects are creeping into mainstream American cuisine, especially Mexican chapulines (grasshoppers).
- Philadelphia has a thriving Latin-American community; many view chapulines as comfort food.
- Grasshopper tacos described as tasting surprisingly good.
- The market is still very much untapped and unregulated.
- They offer a sustainability that traditional proteins cannot provide.
- The only drawback is that dangerous amounts of lead or gastrointestinal blockages can be caused by excessive eating.

Contact details: Marilyn D'Angelo = <u>mdangelo@whyy.org</u>

27) **Source:** BuzzFeed, social news and entertainment site (general audience), 30/1/2014 **Title:** *Why You Should Eat Bugs*

Link: <u>http://www.buzzfeed.com/celestinomark/why-you-should-eat-bugs#responses</u> Summary of content:

- Positive tone
- A short video featuring several young adults trying edible insects.
- They are disgusted by the idea at first but at the end of the video say that the insects actually tasted nice.
- Many Americans are already eating parts of insects but they have no idea.
- Insects are described as being healthy and very similar to crustaceans.
- Insect farming could provide a cheap, sustainable food source for the future.

Contact details: <u>http://www.buzzfeed.com/about/contact</u>



28) Source: Sunday News, Zimbabwean news site (general audience), 2/2/2014
 Title: Edible insects Series 1: Cicadas (Christmas beetle)
 Link: <a href="http://www.sundaynews.co.zw/index.php?option=com_content&view=article&id=37947:edible-insects-series-1-cicadas-christmas-beetle&catid=44:environment-a-tourism&Itemid=136#.UvC4Z_l_uSo

Summary of content:

- Positive tone
- Part of a series on the use of insects as food in Zimbabwe.
- Information is given on the biology and ecology of cicadas.
- States that cicadas can be eaten and taste like popcorn and pinecones. Also they are high in protein, fat, vitamins and minerals.
- They can also be used as fishing bait.

Contact details: Lawson Mabhena (news editor) = lawson.mabhena@zimpapers.co.zw

29) Source: BusinessWeek, USA business news site (general audience), 3/2/2014

Title: Two Young Entrepreneurs Pitch Cricket Bars for the Paleo CrowdLink: http://www.businessweek.com/articles/2014-02-03/two-young-entrepreneurs-pitch-cricket-bars-for-the-paleo-crowd

Summary of content:

- Neutral tone
- An interview with the founders of Exo, a start-up company that make insect protein bars.
- They have teamed up with the former head of research at the Fat Duck (UK 3 Michelin star restaurant) to find new recipes.
- They are taking up residence at AccelFoods, a New York accelerator for food start-ups, where they'll work on building a market for protein bars made with cricket powder.
- They want to improve sustainability by using cricket excrement to fertilise plants that they the feed back to the crickets.
- Cricket protein bars fit into the current 'paleo' food trend.

Contact details: Patrick Clark = @pat_clark (twitter)

30) Source: AOL, USA news and lifestyle video site (general audience), 4/2/2014

Title: How to make a mealworm pizza

Link: <u>http://on.aol.com/video/how-to-make-a-mealworm-pizza-518111541</u> Summary of content:

- Positive tone



- Daniella Martin, author of insect recipe book, shows viewers how to make a pizza with edible insects.
- She uses cricket flour to make the dough and describes how to process them. They are a good source of iron and calcium.
- The pizza is topped with spicy fried mealworms

Contact details:

http://feedback.aol.com/product/aolon/?tid=422&r=http%3A%2F%2Fon.aol.com%2 Fvideo%2Fhow-to-make-a-mealworm-pizza-518111541&ch=

31) Source: Metro, UK newspaper (general audience), 5/2/2014

Title: Anyone for cricket? Bug snacks made with 3D printer Link: <u>http://metro.co.uk/2014/02/05/anyone-for-cricket-bug-snacks-made-with-3D-</u>printer-4290993/

Summary of content:

- Negative tone
- Images of different shapes made using a 3D printer and 'bug paste' consisting of ground up crickets and dung beetles.
- Implies that these snacks do not look tasty and are unappealing.
- Researchers at South Bank University state insects will be a solution to some food problems.

Contact details: editorial.enquiries@ukmetro.co.uk

32) Source: Gizmodo, UK gadget news site (general audience), 5/2/2014
 Title: Would You Eat 3D Printed Insect Snacks to Help Lower World Hunger?
 Link: http://www.gizmodo.co.uk/2014/02/would-you-eat-3D-printed-bugs-to-help-lower-world-hunger/

- Neutral tone
- Scientists agree that we should start eating insects, but getting the public to do that is a big challenge.
- A 3D printed snack made out of insect paste could be more acceptable to consumers.
- It is a marketing issue, insects just need a rebrand.
 Contact details: Gary Cutlack = cutlack@btinternet.com
- 33) Source: : Time, American news magazine site (general audience), 5/2/2014
 Title: 3D Printing Company Makes Edible Cricket and Dung Beetle "Treats"
 Link: <u>http://newsfeed.time.com/2014/02/05/3D-printing-company-makes-edible-cricket-and-dung-beetle-treats/</u>



Summary of content:

- Neutral tone
- Portuguese designer, Susan Soares, uses 3D printing to make insects more palatable. They are formed into different shaped wafers.
- The argument for eating insects is rational but people are adverse to the idea.
- This idea probably will not work on a large scale.
- Other ways to get people to eat insects are suggested e.g. wrap in bacon.

Contact details: Kate Knibbs = @kateknibbs (twitter)

34) Source: Yahoo, USA news and lifestyle site (general audience), 5/2/2014

Title: *This Beautiful Pottery Is Made of 3D-Printed Edible Bug Powder* Link: <u>https://www.yahoo.com/tech/this-beautiful-pottery-is-made-of-3D-printed-</u> edible-bug-75695660382.html

Summary of content:

- Neutral tone
- Susana Soares is using 3D printers to make edible structures out of insect powder.
- The substance is mixed with an icing butter, cream cheese or water, plus a gelling agent and flavouring.
- Raises the question of whether we would be more inclined to eat insects if they don't actually resemble insects.
- A video on how the shapes are made is included at the end of the article.

Contact details: Brian Heater = @bheater (twitter)

35) Source: The Telegraph, UK newspaper site (general audience), 5/2/2014

Title: Insects to be turned into cakes and bread

Link: <u>http://www.telegraph.co.uk/science/science-news/10619201/Insects-to-be-</u>made-into-3D-food.html

- Neutral tone
- Scientists can grind mealworms and ants into flour and use a 3D printer to turn them into tasty snacks.
- Ken Spears, a food technologist at South Bank University believes that eating insects could not only solve food shortage problems but also ensure people get enough protein and minerals.
- The insects are mixed with either chocolate, cream cheese or spices.
- They hoped to be able to use other more exotic insects in the future, with a higher protein count, such as South African mopane worms.



- There is a possibility of the insect products being used as a food supply in disaster areas. The university is hosting free demos with tasting sessions and debates.

Contact details: Claire Carter = <u>claire.carter@telegraph.co.uk</u>

36) Source: Boston Herald, USA local news site (general audience), 6/2/2014

Title: Author, chef tout benefits of eating insects

Link: <u>http://bostonherald.com/entertainment/food_dining/food_recipes/2014/02/a</u> <u>uthor_chef_tout_benefits_of_eating_insects</u>

Summary of content:

- Neutral tone
- Interview with Daniella Martin who is the author of insect recipe book.
- Her blogs inspired the chef, Rachel Miller, who raises crickets and grinds them into flour for personal consumption.
- She doesn't do it because of the flavour but because it is about embracing a more sustainable lifestyle.
- Another chef says that he tried ants in Brazil but is still trying to decide if he liked them.

Contact details: Tenley Woodman = <u>tenley.woodman@bostonherald.com</u>

37) Source: Rolnicke noviny, Slovakian agriculture industry news site (specialist

audience), 6/2/2014 **Title:** *Insects in the feed trough* **Link:** <u>http://rno.sk/hmyz-v-krmnom-zlabe/</u>

Summary of content:

- Positive tone
- An overview of the work of the PROteINSECT project

Contact details: Bohumil Urbánik (editor) = <u>bohumil.urbanik@rno.sk</u>

38) Source: VPR, USA local radio site (general audience), 6/2/2014

Title: Do I Dare To Eat A Bug?

Link: <u>http://digital.vpr.net/post/do-i-dare-eat-bug</u>

- Neutral tone
- Interview with Rachael Young, an environmentalist who is trying to promote the consumption of insects.
- The FAO report is mentioned and the benefits of entomophagy are described.
- She gives tips on how to prepare insects.



She hopes to educate the public, especially children
 Contact details: Ric Cengeri = <u>rcengeri@vpr.net</u>

 Source: ThomasNet, International product industry news (specialist audience), 7/2/2014

Title: Future High-Protein Diet Is the Six-Legged Kind Link: <u>http://news.thomasnet.com/IMT/2014/02/07/the-light-side-the-laser-to-rule-all-lasers/</u>

Summary of content:

- Neutral tone
- Hesitance about eating insects has as much to do about their appearance as cultural background.
- Susan Soares at London's South Bank University is using a 3D printer to make edible insect snacks.
- The university is hosting free demos with tasting sessions and debates.
- Suggestion by the author that this is better than the cockroach farming industry in China.

Contact details: info@productnews.com

40) **Source:** The Huffington Post, USA news site (general audience), 7/2/2014

Title: Daniella Martin Wants To Save The World One Insect Meal At A Time Link: <u>http://www.huffingtonpost.com/2014/02/07/daniella-</u> martin n 4724611.html?utm hp ref=food&ir=Food

Summary of content:

- Positive tone
- Interview with Daniella Martin, entomophagist and author of edible insect recipe book.
- Insects are environmentally friendly but more importantly, they taste great.
- Sushi is now commonplace but public acceptance of insects could prove more difficult.
- Insects work particularly well as bar snacks.
- Images and descriptions of Daniella's favourite insect dishes are shown.
- There is an accompanying video showing Daniella being interviewed. The hosts try some of the edible insects and are very positive about them.

Contact details: David Moye = @dmoyeweirdnews (twitter)

41) **Source:** Salon, USA news and entertainment site (general audience), 8/2/2014 **Title:** *The creepy crawly solution to the world's growing hunger problem: Eat more bugs!*



Link: <u>http://www.salon.com/chromeo/article/the_creepy_crawly_solution_to_the_w</u> orlds_hunger_problems_eat_more_bugs/

Summary of content:

- Neutral tone
- An interview with entomophagist Daniella Martin.
- The fitness and foodie communities are ones to target first.
- Vegetarianism and veganism are not good alternatives to meat.
- There are fewer ethical issues associated with rearing and eating insects.
- The only potentially harmful effect of eating bugs is that there might be an allergy risk for some people.

Contact details: pr@salon.com

42) **Source:** China Women's News, Chinese newspaper site (general audience), 9/2/2014

Title: Wu Xiulan: create special breeding industry chain

Link: http://www.china-

woman.com/rp/main?fid=open&fun=show news&from=view&nid=103330&ctype=
3

Summary of content:

- Neutral tone
- A profile of Wu Xiulan, rears insects for feed and is considered a leader of the special breeding industry chain.

Contact details: zhnxw38@sohu.com

 43) Source: All About Feed, Feed industry news site (specialist audience), 10/2/2014
 Title: FAO & University organise Insects to feed the world conference
 Link: <u>http://www.allaboutfeed.net/Nutrition/Raw-Materials/2014/2/FAO--</u> University-organise-Insects-to-feed-the-world-conference-1460115W/

Summary of content:

- Neutral tone
- Information about the FAO and Wageningen University conference on insects to feed the world.
- There is an urgent need to find alternative protein sources and insects could be one solution.
- Specific areas that the conference hopes to focus on include an overview of the current status, standardizing methodologies and networking opportunities.

Contact details: Emmy Koeleman (editor) = <u>emmy.koeleman@reedbusiness.nl</u>

44) **Source:** The Huffington Post, USA news site (general audience), 10/2/2014



Title: Here's Why You Should Start Eating (More) Bugs Link: <u>http://www.huffingtonpost.com/2014/02/10/eating-bugs-food_n_4726371.html</u>

Summary of content:

- Positive tone
- Insects could be the next big food trend. High end restaurants are already putting them on their menu.
- There is a list of reasons why we should be eating insects.
- They are high in protein, they could help solve world hunger, they don't use up a lot of resources, they could help curb obesity, they can't make us sick in the way that meat can, there are parallels with sushi which is now a delicacy and we are already unintentionally eating insects anyway.

Contact details: Contact details: Sara Boboltz = @sara_bee (twitter)

45) Source: CommNet, Bioeconomy communications site (specialist audience),

11/2/2014

Title: Should we feed animals with insect protein? Your chance to have YOUR say! Link:<u>http://commnet.eu/07 Press/Members Press Releases/Should-We-Feed-</u> Animals-With-Insect-Protein-Your-Chance-To-Have-YOUR-Say.kl

Summary of content:

- Neutral tone
- PROteINSECT press release promoting the survey on the use of insects in animal feed.

Contact details: commnet.eu

46) Source: Bakery and Snacks, Baking industry news site (specialist audience),

11/2/2014

Title: Are 3D printed insect snacks the taste of the future?

Link: <u>http://www.bakeryandsnacks.com/R-D/Are-3D-printed-insect-snacks-the-taste-of-the-future</u>

- Neutral tone
- A team at South Bank University are bringing together two food innovations: 3D printing and edible insects.
- There are some problems, the insect flour is mixed with a fondant carrier and high fat content blocks the injector heads.
- They are working on de-fatting the insect material but current techniques are unsafe.



- 3D printing enables us to overcome the traditional aesthetic issues associated with eating insects.

Contact details: Annie-Rose Harrison-Dunn =

http://www.bakeryandsnacks.com/smartlead/view/209068/4/Feedback_editors?ref errer=879704

47) **Source:** Nutra Ingredients, USA supplement and nutrition news site (specialist audience), 12/2/2014

Title: Process tweak yields a superior cricket protein, developer says Link: <u>http://www.nutraingredients-usa.com/Suppliers2/Process-tweak-yields-a-</u> <u>superior-cricket-protein-developer-says</u>

Summary of content:

- Neutral tone
- Biochemist Aaron Dossey has developed a new process to create protein powder from insects yielding superior results.
- His innovation is to grind frozen insects before roasting and drying, it prevents nutrient degradation.
- He has received a significant number of orders for his ingredient for use in protein bars.
- The UN is very interested in insect protein for famine relief.

Contact details: Hank Schultz = <u>hank.schultz@wrbm.com</u>

48) **Source:** The Times, UK Newspaper (general audience), 12/2/2014

Title: Crunch time for the insect-eating entrepreneurs Link:<u>https://www.mcgill.ca/desautels/sites/mcgill.ca.desautels/files/channels/attach</u>/crunch_time_for_the_insect-eating_entrepreneurs.jpg.pdf

Summary of content:

- Neutral tone
- Focus on the edible insect initiative, Aspire, who won the Hult Prize for social entrepreneurism last year.
- Their business model allows people to produce crickets for their personal consumption then sell on the surplus for profit.
- An overview of the structure and the background of the Hult Prize competition is given.

Contact details: https://www.hetimes.co.uk

49) Source: CNBC, USA business news TV channel (general audience), 13/2/2014 Title: Delish! Entrepreneurs promoting food made with insects Link: <u>http://www.cnbc.com/id/101408021</u> Summary of content:

it:



- Positive tone
- TV interview conducted about the potential of edible insects, we need to find a way to farm insects in the long term.
- An interview with the cofounder of Six Foods.
- The environmental benefits of entomophagy are illustrated by a graph.
- Several entrepreneurial organisations are starting to produce insect flour and other insect products.
- At a recent U.N. conference, the cookies were passed around the room—and audience members clamoured for seconds.

Contact details: Kelly Holland = @KKelleyHolland (twitter)

50) **Source:** The Patriot, Zimbabwean newspaper site (general audience), 13/2/2014 **Title:** *Zimbabwe's sacred forests: Part Two*

Link: http://www.thepatriot.co.zw/?p=2158

Summary of content:

- Neutral tone
- Sustainable environment management strategies are important.
- The stink bug, harurwa, is consumed as a delicacy in SE Zimbabwe.
- The harvesting and processing techniques are described. Villagers have to remove the stinkbugs' defence chemical to improve palatability.
- Awareness of beneficial insects in rural areas could lead to reconsideration of current environmental management strategies.

Contact details: <u>http://www.thepatriot.co.zw/?page_id=1751</u>

51) **Source:** Feed Navigator, European feed industry news site (specialist audience), 13/2/2014

Title: *Insects billed as feed of the future*

Link: http://www.feednavigator.com/R-D/Insects-billed-as-feed-of-the-

<u>future?utm_source=AddThis&utm_medium=Twitter&utm_campaign=SocialMedia/#</u> .Uwy9UrKCVJ4.twitter

Summary of content:

- Neutral tone
- Insects in animal feed could soon be a reality according to the FAO.
- Arnold van Huis says explains why a lack of regulatory framework, limited risk assessment methods and labour intensive production are holding back investment.
- Elaine Fitches, co-ordinator of PROteINSECT, is optimistic that insect protein will be included in pig and poultry feed in the future.
- PROteINSECT's survey is mentioned.

Contact details: Jane Byrne = jane.byrne@wrbm.com



52) **Source:** The Austin Chronicle, USA local news site (general audience), 14/2/2014 **Title:** *The Future Food Salon Carries a Message of Tasty Protein on Six Legs* **Link:** <u>http://www.austinchronicle.com/food/2014-02-14/the-future-food-salon-carries-a-message-of-tasty-protein-on-six-legs/</u>

Summary of content:

- Positive tone
- Toronto-based Alimentary Initiatives is hosting an edible insect tasting event.
- Crickets, when properly prepared, taste delicious.
- The FAO report is mentioned.
- A growing number of organizations are working to extend general public perception beyond the bounds of novelty.
- The founder of Little Herds is helping to host the event.

Contact details: Wayne Alan Brenner = <u>Brenner@austinchronicle.com</u>

53) **Source:** European Public Affairs, EU affairs news site (general audience), 14/2/2014 **Title:** *Insects for feed... and for food?*

Link: http://www.europeanpublicaffairs.eu/insects-for-feed-and-for-food/

Summary of content:

- Positive tone
- Rejection of eating insects is not rational behaviour but a cultural issue.
- Experts have started to point at insect food as one of the necessary ingredients of food security, either for feeding livestock or for introducing them into people's diets.
- The rationale behind PROteINSECT is explained and an update of the project's progress is given. Safety and quality analysis of insect material is just about to begin.
- The ambiguity surrounded insects as food is highlighted.
- Belgium is the first EU country to authorise edible insects.

Contact details: Silvia Curbelo Betancort =

silvia.c.betancort@europeanpublicaffairs.eu

54) **Source:** VietnamNet, Vietnamese online newspaper (general audience), 14/2/2014 **Title:** *The famous dishes from insects in Vietnam*

Link: <u>http://english.vietnamnet.vn/fms/travel/95368/the-famous-dishes-from-insects-in-vietnam.html</u>

- Positive tone
- Dishes using edible insects found in Vietnam. 'Creepy' looking insects can become unforgettable delicacies.



- Meals include Stink bugs roasted with lemon leaves, bee larvae and coconut worms.
- Descriptions of how the insects are prepared and then cooked are provided.
- Information on which dishes are made in which region of Vietnam is given.

Contact details: <u>evnn@vietnamnet.vn</u>

55) **Source:** OZY, USA Daily digital magazine site (general audience), 14/2/2014 **Title:** *Bugs: They're what's for Dinner*

Link: <u>http://www.ozy.com/fast-forward/heap-some-bugs-on-your-plate/6380.article</u> Summary of content:

- Neutral tone
- Entomophagist Monica Martinez has opened an edible bug stand called Don Bugito which serves smoky-flavoured wax moth larvae tacos and caramelized mealworms sprinkled over vanilla ice cream. A video of her explaining her work accompanies the article.
- The FAO report and upcoming conference are referenced.
- Insect dishes have begun to creep into ethnic and high-end restaurants and for the less adventurous, some start-ups are sneaking insects into protein bars by grinding them into flour.
- Some are sceptical and believe that insects will remain a novelty in the USA and Europe.
- The environmental, nutritional and health benefits of insects are listed.
- Some entomophagists don't see consumer palates as the problem, the problem is getting enough raw materials to supply the market.
- Some believe that the most Western consumers will accept is indirectly eating insects via insect-based livestock feed.

Contact details: Stacy Ventura = <u>stacy@stacyventura.com</u>

56) Source: Treehugger, Sustainability news site (general audience), 14/2/2014

Title: Open source DIY bug farm aims to make growing edible insects at home as easy as growing sprouts

Link: http://www.treehugger.com/clean-technology/open-source-bug-farm-aimsmake-growing-edible-insects-home-easy-and-fun.html

- Positive tone
- Insects are more efficient than traditional livestock and have lower space and water requirements.
- Tiny Farms are launching the world's first open source bug farm kit in March.
- The goal is to produce an open source system out of low-cost and readily available materials, so potential insect farmers can easily build their own system for themselves.



- The company is building a web-based farm management software system, which will enable farmers to track their activity, to keep records, and to analyse and compare their own data with other insect farmers.

Contact details: Derek Markham = @derekmarkham (twitter), editor@treehugger.com

57) **Source:** Food Navigator, European Food and Beverage news site (specialist audience), 14/2/2014

Title: *Europeans may be 'ready to buy and cook' insects, finds Belgian study* **Link:** <u>http://www.foodnavigator.com/Science-Nutrition/Europeans-may-be-ready-to-buy-and-cook-insects-finds-Belgian-study</u>

Summary of content:

- Neutral tone
- A team of scientists in Belgium have found that eating insects was 'mainly well accepted' by consumers participating in a study, regardless of their age or sex.
- The results show that consumers are ready to buy and cook insects at home if they can be associated with familiar flavours.
- The findings should be treated with some caution however because the participants were visitors to an insectarium and therefore already have an interest in insects.

Contact details: Nathan Gray = <u>nathan.gray@wrbm.com</u>

58) **Source:** Dezeen, UK Architect and design site (general audience), 14/2/2014 **Title:** *Entomo website design promotes insects as food*

Link: <u>http://www.dezeen.com/2014/02/14/entomo-website-design-promotes-insects-as-</u>

<u>food/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+dez</u> <u>een+(Dezeenfeed)</u>

Summary of content:

- Neutral tone
- Lara Hanlon is a Dublin-based graphic designer who has developed a digital resource encouraging people to eat insects.
- Entomo uses research, recipes, events and education facilities to confront the prejudices associated with eating creepy-crawlies.
- The site also has an online shop where visitors can buy insects such as crickets and grasshoppers.
- The project won the New Star Award at the Shenzhen Design Awards for Young Talents in China. This prize awards projects for their urban sustainability credentials and ability to improve the standard of living in cities across the world.

Contact details: Marcus Fairs (editor) = marcus@dezeen.com



- 59) Source: The Day, USA local news site (general audience), 16/2/2014 Title: YUCK! Bug-eaters chow down at Pequot Museum exhibit Link: <u>http://www.theday.com/article/20140216/NWS01/302169925/-1/NWS</u> Summary of content:
 - Neutral tone
 - Edible insects were on offer at a local museum exhibition.
 - Entomophagist David Gracer explained the benefits of eating and insects and described the taste of those that he had tried.
 - Fried crickets were handed out to the audience. The reaction was mixed. An 8 year old grimaced and spat one out whilst others described them as tasting like French fries or corn.

Contact details: Anna Isaacs = <u>a.isaacs@theday.com</u>

60) **Source:** The Blade, USA local newspaper site (general audience), 17/2/2014 **Title:** *Bug bonanza*

Link: http://www.toledoblade.com/Editorials/2014/02/18/Bug-bonanza-Foodmovement-seeks-to-break-Westerners-taboo-against-eating-the-world-s-mostplentiful-protein-source-Insects.html

Summary of content:

- Positive tone
- Insects such as locusts were consumed in biblical times
- There is now a movement set to break the Western taboo of eating insects.
- High-end restaurants are offering conventional food dishes sprinkled with insects, crickets can be bought at supermarkets.
- The UN report and upcoming conference are referenced.
- 2 billion people regularly eat insects and with traditional sources of food under scarcity perhaps humans will 'rediscover the wisdom of eating bugs'.

Contact details: Kurt Franck (editor) = <u>kfranck@theblade.com</u>

61) **Source:** Food Navigator USA, American food and beverage news site (specialist audience), 18/1/2014

Title: 'Innovation in product development and formulation is needed for insects to emerge as a mainstream food source': UN advisor on edible insects Link: <u>http://www.foodnavigator-usa.com/People/Innovation-in-product-</u> <u>development-and-formulation-is-needed-for-insects-to-emerge-as-a-mainstream-</u> <u>food-source-UN-advisor-on-edible-</u>

insects?utm source=RSS text news&utm medium=RSS%2Bfeed&utm campaign=R
SS%2BText%2BNews



- Neutral tone
- Arnold van Huis, advisor on edible insects to the UN has said that insects on people's plates are inevitable.
- Innovation in product development and innovation is needed.
- Charles Spence of Oxford University agrees that edible insects are on their way but it may be 2024 rather than 2014 when they go mainstream.
- Both are attending the Food Vision conference in Cannes where future food sources are to be discussed.

Contact details: Stephen Daniells = <u>stephen.daniells@wrbm.com</u>

62) **Source:** Marketing Magazine, UK marketing industry news site (specialist audience), 18/1/2014

Title: Insects and Chang Beer on menu at London pop-up Link: <u>http://www.marketingmagazine.co.uk/article/1281268/insects-chang-beer-menu-london-pop-up</u>

Summary of content:

- Neutral tone
- Thai brand Chang Beer is sponsoring a pop-up restaurant in Shoreditch on the 4th March.
- It is a joint venture between Chang and Grub, a company specialising in edible insects.
- A photo gallery of the insect dishes and their preparation accompanies the article.

Contact details: Claire Beale (editor) = <u>claire.beale@haymarket.com</u>

63) Source: Treehugger, Sustainability news site (general audience), 18/2/2014

Title: How to eat yummy bugs (Recipe)

Link: <u>http://www.treehugger.com/green-food/how-eat-yummy-bugs-</u> recipe.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3 A+treehuggersite+(Treehugger)

Summary of content:

- Neutral tone
- Entomophagist Rachel Young is trying to encourage people to eat insects out of a desire to conserve the land and water resources.
- She founded the business Eat Yummy Bugs
- Young outlines some of the benefit of eating bugs they are a 'renewable resource' and a 'superfood' full of vitamins and minerals.
- The majority of the article is dedicated to a recipe for banana-oat mealworm muffins with cricket flour.

Contact details: editor@treehugger.com



- 64) Source: The Daily Mail, UK Newspaper site (general audience), 19/2/2014
 Title: Would you eat sweets made from INSECTS? Scientists 3D print crunchy cinnamon snacks using ground up bugs
 Link: http://www.dailymail.co.uk/sciencetech/article-2563052/Would-eat-sweets-INSECTS-Scientists-3D-print-crunchy-cinnamon-snacks-using-ground-bugs.html
 Summary of content:
 - Positive tone
 - A team from London's South Bank University believe their 'cute canapés' could be the future of sustainable food.
 - The snacks the have an overriding taste of cinnamon and ginger and a pleasant crunch when ready, but will be developed in a range of flavours
 - A text box lists reasons why we should eat insects including the environmental and nutritional benefits.
 - The snacks aren't likely to be on sale soon they are prototypes but the potential is huge.

Contact details: Sarah Griffiths = @SarahCGriffiths (twitter)

65) **Source:** Fox News, USA TV news channel (general audience), 21/2/2014 **Title:** *Cricket energy bars aim to get more Americans to eat bugs* **Link:** <u>http://www.foxnews.com/leisure/2014/02/21/energy-bars-made-from-crickets/</u>

Summary of content:

- Neutral tone
- A news report on the protein bars being made out of crickets.
- The UN report is referenced, we are going to have to start considering eating insects.
- People are already eating parts of insects that they don't know about in chocolate and cereal for example.
- Advantages of insects include the fact that they require less water than beef and that there are 200 million insects per person on the planet.
- A presenter eats a cricket live on air and describes it as 'actually pretty nasty', the co-presenter remarks that she is going to stick with chicken and meat.

Contact details: Kelly David Burke = @burkelly (twitter)

66) Source: KBZK, USA local news site (general audience), 21/2/2014

Title: *MSU Bug Buffet is Both Delicious and Nutritious* Link: <u>http://www.kbzk.com/news/msu-bug-buffet-is-both-delicious-and-nutritious/</u> Summary of content:

- Positive tone
- A 'bug buffet' was put on for students at Montana State University.



- A student being interview said he enjoyed the taste once he got used to the texture.
- 'These bugs are not only supposed to be yummy but they're incredibly good for you.' Compared to a similar sized serving of beef, they contain more calcium, iron and beef.

Contact details: Keele Smith = ksmith@kbzk.com

67) Source: Vice, International arts and culture magazine site (general audience),

24/2/2014

Title: Bugs are nutritious, so we should eat them all Link: <u>http://www.vice.com/read/bugs-are-nutritious-so-we-should-eat-them-all</u> Summary of content:

- Neutral tone
- An interview with Megan Miller, founder of Bitty Foods, a baking company that is developing a line of cookies, muffins, and other treats using cricket flour.
- She got the idea whilst traveling in Southeast Asia and Central America, where insects are a common part of the diet.
- Insects are nutritionally comparable to meat and contain the full range of amino acids that meat does.
- She chose to focus on crickets as they most culturally appealing for Westerners because they already have positive cultural associations.
- She believes Westerners have an aversion to eating insects because they associate it with poverty and famine.
- The key is to make insects in the hands of higher socio-economic classes so they will be seen as more desirable.

Contact details: Lauren Rothman = @Lochina186 (twitter)

68) **Source:** First Post, Indian news site (general audience), 25/2/2014

Title: How Europe-based Micronutris is making insects edible Link: <u>http://www.firstpost.com/photos/photos-how-europe-based-micronutris-is-making-insects-edible-1407113.html?photoid=4</u>

Summary of content:

- Neutral tone
- Photo gallery about Micronutris, a French company that is the only firm in Europe that raises insects for human consumption.
- The insects are sold live, dried or rendered into flour-like powder for use in pastries.
- Farming systems for crickets and mealworms are shown.

Contact details: breakastory@firstpost.com



69) **Source:** The Atlantic, USA politics, business and culture magazine site (general audience), 25/2/2014

Title: To Save the World, Eat Bugs

Link: <u>http://www.theatlantic.com/health/archive/2014/02/to-save-the-world-eat-</u>bugs/283970/

Summary of content:

- Neutral tone
- A general discussion on entomophagy.
- The FAO report is discussed as it dedicated a chapter on how to come negative perceptions of insects in the West.
- Chefs have tried to introduce insect dishes but the idea hasn't trickled down much yet.
- Heavy investment in infrastructure is required if an insect farming industry is to take off.
- There are ethical arguments for eating insects as they are killed very humanely. Vegetarians are open to the idea.

Contact details: Cayte Bosler = @caytebosler (twitter), <u>http://www.theatlantic.com/contact/</u>

70) **Source:** This Morning, UK daytime TV programme (general audience), 25/2/2014 **Title:** *Creepy Crawly Cravings*

Link: <u>http://www.itv.com/thismorning/hot-topics/eating-worms-locusts-bugs-creepy-crawly-crawings</u>

Summary of content:

- Positive tone
- An interview with Peter Bickerton, someone who regularly eats insects because he is interested in sustainability and finds them healthy and nutritious.
- He argues the case for eating insects and the benefits given in the FAO report are mentioned.
- The presenters agree that the idea makes sense but it is hard to get your ahead around.
- Insects are not cheap to buy at the moment but the price would go down if more people did it.
- One presenter was horrified at the prospect of eating insects, the other ate various insects and said that they tasted quite nice.
- Viewer comments on the topic were mixed.

Contact details: viewerservices@itv.com

71) **Source:** Liverpool confidential, UK local news site (general audience), 25/2/2014 **Title:** *And a portion of egg fried lice please*

Link: <u>http://www.liverpoolconfidential.co.uk/Food-and-Drink/And-a-portion-of-egg-</u><u>fried-lice-please</u>

Summary of content:

- Positive tone
- A pestaurant is being opened in Liverpool serving crickets, mealworms and ants.
- It follows a successful trial event at the Science Museum in London.
- It is being hosted by Rentokil to celebrate the business's 85th birthday.
- Whilst it all looks fun, it highlights the serious issue of how to feed an ever growing population.
- According to the FAO's report, food production will need to double by 2050.
 Contact details: <u>editorial@liverpoolconfidential.co.uk</u>

72) **Source:** The Metro, UK newspaper site (general audience), 25/2/2014

Title: Extreme Food

Link: http://metro.co.uk/2014/02/25/gallery-extreme-food-4320062/

Summary of content:

- Neutral tone
- An image gallery of unusual food eaten throughout the world.
- Includes locusts being cooked at a discovery event in Brussels, insect hors d'oeuvres served at New York's museum of Natural History and larvae being prepared for a food market in Mexico
- There are also images of MicroNutris's insect production plant in France the only firm in Europe that raises insects for human consumption.
- The FAO report is referenced.

Contact details: editorial.enquiries@ukmetro.co.uk

73) Source: USA Eat Drink Better, sustainable food news site (general audience),

25/1/2014

Title: Edible Insects Coming To A Table Near You

Link: <u>http://eatdrinkbetter.com/2014/02/25/edible-insects-coming-table-near/</u> Summary of content:

- Positive tone
- We will be seeing insects on our plate soon, everyone is talking about it.
- Don Bugito is an edible insect street project that sells products such as chocolate covered crickets.
- Top chef Alex Atala is known for serving insect dishes in his restaurant.
- Chapul cricket bars are the first insect-based protein bars.
- The FAO report shows that eating insects makes a lot of sense and the innovative entrepreneurs are making it a tasty option too.

Contact details: Jennifer Kaplan = @greenhance (twitter)



 74) Source: My San Antonio, USA local news site (general audience), 27/2/2014
 Title: Adventurous Eaters Sample Bugs at Little Herds Future Food Salon in Austin
 Link: http://blog.mysanantonio.com/monikamaeckle/2014/02/adventurous-eaterssample-bugs-at-little-herds-future-food-salon-in-austin/

Summary of content:

- Positive tone
- Little Herd's hosted an edible insect event in Texas.
- There are serious concerns about food security and sooner or later, the USA will have to join the 2 billion people in other countries that regularly consume insects.
- The author tried a variety of edible insects and enjoyed the chapul protein bars the most.
- People shouldn't scoff at the idea because it wasn't that long ago that we snubbed sushi. It won't be long before insects achieve the same status.

Contact details: Monika Maeckle = butterflybeat@gmail.com

75) **Source:** Marxist, International political news site (general audience), 28/2/2014 **Title:** *Let them eat insects*

Link: http://www.marxist.com/let-them-eat-insects.htm

Summary of content:

- Negative tone
- The FAO's proposal demonstrates that institutions dedicated to fighting famine have failed miserably.
- Instead of finding ways to improve the lives of poor farmers and to help the world to address the problems of food production, the FAO is saying that we are all heading for a situation where we should reach for something edible in cracks in the walls.
- We don't need to switch to insect eating, food scarcity is a myth as demand and supply for food is growing at a similar rate.
- 50% of food is being wasted along the way, ironically this waste would be used to feed insects we are being told to eat.

Contact details: http://www.marxist.com/contact-us.htm

76) **Source:** USA Today, USA news site (general audience), 28/2/2014

Title: Get the buzz on bug-based cuisine

Link: <u>http://www.usatoday.com/experience/food-and-wine/news-festivals-</u> events/get-the-buzz-on-bug-based-cuisine/5861467/

- Positive tone
- There are dozens of places around the USA serving insect, from food carts to museums to high-end eateries.



- Those engaged in entomophagy are hoping that insects will follow in the footsteps of sushi.
- People aren't ready to eat whole crickets; insects need to look beautiful and not shocking.
- The benefits of eating insects are outlined in the FAO report.
- The average person is already inadvertently consuming 500 grams of insects per year.
- The ball has started rolling, especially among young people.

Contact details: Sarah Sekula = sarah@sarahsekula.com

77) Source: China News, Chinese news site (general audience), 28/2/2014

Title: *Eat small insects England Venture Road returnees environmental rearing wisdom made fashionable*

Link: http://www.chinanews.com/lxsh/2014/02-28/5893797.shtml

Summary of content:

- Neutral tone
- A group of entrepreneurs have formed an insect breeding group.
- They have returned from a trip to the UK where they researched how food waste is handled to see if it is suitable to rear insects on.
- Fat can be extracted from these insects to be used in cosmetics, protein can be extracted and made into powder to use in chicken and pig feed, dried insects can be used to feed fish and the insect dung itself it a good organic fertiliser.

Contact details: http://www.chinanews.com/common/footer/contact.shtml

78) **Source:** The Week, USA news magazine site (general audience), 1/3/2014 **Title:** *The benefits of eating bugs*

Link: <u>http://theweek.com/article/index/257208/the-benefits-of-eating-bugs</u> Summary of content:

- Positive tone
- A feature written by entomophagist Daniella Martin explaining the evolutionary history of insect eating.
- The currently popular "paleo diet" is explained. Mammals have been insectivorous for 150 million years. Consequently, the nutritional properties of insects have shaped the nutritional requirements of present-day humans.
- One thing that unites primatehood throughout the ages is an enduring appetite for bugs.
- Insects provide all sorts of things that humans thrive on: protein, iron, calcium, and, best of all, healthy, unsaturated long-chain essential fatty acids (EFAs).
 Contact details: http://theweek.com/home/info/contact

79) Source: Hackney Gazette, UK local newspaper site (general audience), 2/3/2014

Title: Hoxton's pop-up answer to I'm A Celebrity will serve beetle larvae, meal worms, crickets and grasshoppers

Link: http://www.hackneygazette.co.uk/news/hoxton s pop up answer to i m a celebrity will serve beetle larvae meal worms crickets and grasshoppers 1 338 8329

Summary of content:

- Neutral tone
- A pop-up restaurant in London will be serving edible insects for a 4 day period.
- A top Thai chef has helped create the seven-course menu, which includes crispy insect noodles, crickets in hoi sin sauce with sticky rice, deep fried crickets with pandanas leaves and meal worm rice cakes. Tickets cost 336.50.
- The nutritional and environmental benefits of entomophagy are explained by the organisers of the event.

Contact details: Emma Bartholomew = <u>emma.bartholomew@archant.co.uk</u>

80) **Source:** Bustle, USA women's interest news site (general audience), 3/3/2014 **Title:** *Why eating insects makes sense nutritionally and economically. Yes, really* **Link:** <u>http://www.bustle.com/articles/17050-why-eating-insects-make-sense-</u> <u>nutritionally-and-economically-yes-really</u>

Summary of content:

- Positive tone
- Canadian business students believe that insects are part of an impending food revolution.
- Crickets represent a friendly introduction to entomophagy since they are easy to cook and have a mild nutty flavour.
- The nutritional qualities of insects are positive and they are environmentally friendly.
- The author tried a cricket taco and said it had an unusual mouthfeel but tasted inoffensive

Contact details: Pamela J Stubbart = @amelapay (twitter)

81) Source: National Post, Canadian news site (general audience), 3/3/2014

Title: Jennifer Sygo: Are you ready to eat bugs? Get past the creep and crawl factor because insects are a great way to get protein and healthy fats Link: <u>http://life.nationalpost.com/2014/03/03/jennifer-sygo-are-you-ready-to-eatbugs-get-past-the-creep-and-crawl-factor-because-insects-are-a-great-way-to-getprotein-and-healthy-fats/</u>

- Positive tone
- An outline of all the arguments in favour of eating insects



- The nutritional composition of several insects including grasshoppers, mealworms and termites are described.
- Insect consumption could be an important solution for tackling malnutrition in developing countries.
- Experts warn that we first need to develop sustainable cultivation and harvesting methods.

Contact details: Jennifer Sygo = <u>info@jennifersygo.com</u>

82) Source: FoodTank, International food sustainability news site (general audience),

3/3/2014

Title: Insects on a Global Food Agenda

Link: http://foodtank.com/news/2014/03/insects-on-a-global-food-agenda

Summary of content:

- Positive tone
- The idea of eating insects is challenging for many they are an object of dislike and disgust in the Western society.
- The nutritional and environmental benefits of entomophagy are described.
- Many public and private sectors are harnessing these opportunities, including PROteINSECT, which is working on changing policy to allow insects in animal feed.
- Projects are also taking place in developing countries where insects already have a place at the local food market e.g. GREENiNSECT, a food security project, is investigating implementation of small and large scale insect industries throughout Kenya
- The upcoming *Insects to Feed the World conference* at Wageningen is mentioned. **Contact details:** <u>https://foodtank.com/contact</u>
- 83) Source: Neoplanete, French environmental magazine site (general audience), 3/3/2014

Title: It crunch in the tooth

Link: <u>http://www.neo-planete.com/2014/03/03/ca-croustille-sous-la-dent/</u> Summary of content:

- Neutral tone
- Micronutris grow mealworms and crickets in a warehouse in a French town. They are reared on fresh fruit and vegetables.
- They are dried and sold as chocolate treats or in macarons. Alternatively, they are sold to restaurants and health food stores.
- To circumvent legal restrictions, the company must demonstrate that insects have been significantly consumed by humans in the past.
- PROteINSECT is mentioned as a project that is demonstrating insects to be a good source of protein.



Contact details: webmaster@neoplanete.fr

84) Source: Edible Manhattan, USA Local food magazine site (general audience),

4/3/2014

Title: *Hunger Cure? They're Working Out the Bugs*

Link: <u>http://www.ediblemanhattan.com/departments/notable-edibles/hunger-cure-</u>theyre-working-bugs/

Summary of content:

- Positive tone
- A feature on Aspire Food Group the university students who won the Hult Prize last year.
- Two billion people are as happy to eat insects as we are to eat oysters or lobster.
- The group drew up plans to build facilities in Mexico and Ghana to both supply insects to local markets and teach farmers how to establish their own insect operations.
- They are currently in the pre-production phase.

Contact details: Rachel Nuwer = @rachelnuwer (twitter)

85) **Source:** LiveScience, USA science news site (general audience), 5/3/2014 **Title:** 7 Insects You'll Be Eating in the Future

Link: <u>http://www.livescience.com/43901-eating-insects-bugs-entomophagy.html</u>

Summary of content:

- Positive tone.
- A list of edible insects likely to end up on people's dinner plates in the future.
- The insects listed include mopane caterpillars, termites, witchetty grubs, chapulines, African palm weevil, stink bugs and mealworms.
- The nutritional benefits of each insect species are outlined as well as where they are traditionally eaten.

Contact details: Marc Lallanilla =

http://www.livescience.com/contact_author.php?a=VFdGeVI5Qk1ZV3hzWVc1cGJHe GhLbTFzWVd4c1IXNXBiR3hoS2pNPQ

86) Source: The Daily Mail, UK newspaper site (general audience), 6/3/2014

Title: Anyone for a locust pizza or worm taco? Meet the student who eats INSECTS to stay healthy

Link: <u>http://www.dailymail.co.uk/health/article-2574622/Anyone-locust-pizza-</u>worm-taco-Meet-student-eats-INSECTS-stay-healthy.html

- Neutral tone
- Peter Bickerton is a student who eats insects and is trying to raise awareness of the associated benefits.



- A typical day consists of freeze-dried locust oatmeal for breakfast, a cricket sandwich for lunch and a plate of waxworm tacos for dinner.
- A chain of medical scares among his relatives that prompted him to start eating insects. He states that 'Everything I've read points to the fact that eating bugs is the surest way of avoiding heart disease. It is the healthiest lifestyle out there.'
- He orders his insects from a live breeder in Somerset and admits their costly retail price in the UK is a downside.

Contact details: Emma Innes = <u>emma.innes@dailymail.co.uk</u>

87) Source: WBUR, USA local radio site (general audience), 6/3/2014

Title: *Prefer Your Bugs Fried, Roasted Or Mashed? Artist Offers Taste Of Food's Future*

Link: <u>http://artery.wbur.org/2014/03/06/john-osorio-buck-crickets</u> Summary of content:

- Neutral tone
- Artist John Osorio-Buck is doing a month long project that involves eating insects.
- The FAO report is mentioned. Eating insects has become a paramount symbol of the future of sustainable cuisine.
- He raises crickets on vegetable scraps then freezes and washes them. Then he deep-fries them, or dry roasts them, or mashes the roasted bugs into a powder that he sprinkles onto falafel or granola bars.
- He will offer insects to visitors at the Lincoln museum.

Contact details: Greg Cook = <u>http://www.wbur.org/about/people/greg-cook</u>

 88) Source: FnB News, Indian food and beverage industry news site (specialist audience), 7/3/2014

Title: FAO report promotes insects as edible, citing India's market potentialLink: http://www.fnbnews.com/article/detnews.asp?articleid=35138§ionid=1Summary of content:

- Positive tone
- A feature on the FAO report on edible insects.
- The nutritional and environmental benefits of eating insects are highlighted
- India is mentioned as a potential market since several species of edible insects are native to India and because of the large population and vast food market.
- Parts of India, such as the north-eastern states and the tribal belt, have a culture of eating giant water bugs, grasshoppers, giant caterpillars and termites.
- Collecting and farming insects could provide a diversified employment strategy and multiple income-earning chances in developing countries.

Contact details: editorial@saffronmedia.in

89) **Source:** The Independent, UK newspaper site (general audience), 7/3/2014



Title: Grubs up! Why insects are the food of the future

Link: <u>http://www.independent.co.uk/life-style/food-and-drink/features/grubs-up-why-insects-are-the-food-of-the-future-9177054.html</u>

Summary of content:

- Neutral tone
- Insects have been popping up on menus recently but edible insects have remained a bit niche in the West until now.
- Food companies, such as Grub, have taken note of the FAOs report on edible insects.
- Grub is the first company in the UK to provide fresh insects to individual consumers as well as catering for businesses.
- The current selection includes mealworms, crickets and grasshoppers. They are imported from Holland at the moment but UK production is the next stage of the business plan.
- A number of edible insect cookbooks are now available.
- A massive psychological shift is needed for insects to become mainstream. A critical mass of people needs to try it. In the 1950s, lobster was considered disgusting and was associated with poverty.

Contact details: Emily Jupp = @emilyjupp (twitter)

90) **Source:** The Record, Canadian local news site (general audience), 9/3/2014 **Title:** A feast of crickets and worms to delight the palate

Link: <u>http://www.therecord.com/news-story/4404245-a-feast-of-crickets-and-</u>worms-to-delight-the-palate/

Summary of content:

- Neutral tone
- The 13th Annual Bugfest was held at the Cambridge Butterfly Conservatory this week.
- This year the focus was on the environmental and health benefits associated with eating insects.
- Edible insects were on offer and were enjoyed by some visitors such as an 18 month baby who kept grabbing handfuls of waxworm fried rice.
- For some the taboo of insects was too strong. One visitor said 'it turns my stomach'.

Contact details: Catherine Thompson = <u>cthompson@therecord.com</u>

91) **Source:** The Himalayan Times, Nepal newspaper site (general audience), 10/3/2014 **Title:** *How about insect diet?*

Link:<u>http://www.thehimalayantimes.com/fullNews.php?headline=How+about+insec</u> t+diet%3F&NewsID=408314



- Neutral tone

- The FAO report warns that we will soon have no choice but to consume insects due to the burgeoning world population.

- Common preparation methods and nutrient content of mopane caterpillars, termites, grasshoppers and stinkbugs are described. Information is taken from the FAO report.

Contact details: <u>http://www.thehimalayantimes.com/contactus.php?title=contactus</u>

92) **Source:** Scroll, Indian political and cultural news site (general audience), 11/3/2014 **Title:** *Indian Scientists studying how insects, the staple of Bodo diet, could stave off global famine*

Link: <u>http://qz.com/186677/indias-solution-to-its-coming-famine-get-people-to-eat-insects/</u>

Summary of content:

- Neutral tone
- Indian scientists are studying the insect diet of the Bodo tribe in Assam. They are studying aspects such as chemical composition, micro and macronutrients.
- Bodos consume caterpillars, termites, grasshoppers, crickets and beetles every day. They are generally sun-dried before being eaten.
- Information from the FAO report is given.
- India's long-established caste taboos may derail these experiments. Eating insects is associated with the Dalit (untouchable) caste. If there are other options, people will not accept anything that has a low social marker, whether this is in India or anywhere else in the world.

Contact details: editor@scroll.in

93) **Source:** The Atlantic Cities, USA urban issues site (general audience), 12/3/2014 **Title:** We Should All Be Eating More Insects, But We Probably Won't—Yet Link: <u>http://www.theatlanticcities.com/jobs-and-economy/2014/03/we-should-all-be-eating-more-insects-we-probably-wont-yet/8619/</u>

- Neutral tone
- Indian researchers have been looking at the way the Bodo tribe incorporates caterpillars, beetles, termites, and crickets into a seasonal diet.
- The tribe consumes as many as 29 species of insect. They provide high quality of proteins and supplements (minerals and vitamins) even when dried.
- This is just one small part of a global effort to investigate the nutritional value and feasibility of using insects for nutrition.
- The FAO report and upcoming conference are mentioned.



- Indian researchers are finding that vegetarianism is a big issue that could prevent the uptake of entomophagy. Also, eating insects is widely associated with poverty.
- Cultural habits will make the conversion difficult; unless the FAO's dire predictions become reality.

Contact details: Sarah Goodyear = @buttermilk1 (twitter)

94) **Source:** The Inquisitr,USA viral news site (general audience), 13/3/2014 **Title:** *Edible Cricket Bars Create Buzz At Natural Products Expo West* **Link:** <u>http://www.inquisitr.com/1170846/edible-cricket-bars-create-buzz-at-natural-products-expo-west/</u>

Summary of content:

- Positive tone
- Chapul handed out their cricket-based protein bars at the Natural Products Expo in California.
- Chapul have received lots of attention. They were on the TV show *Shark Tank* (Dragons Den) and have been nominated for an award.
- The chitin from the crickets can help control and lower your cholesterol, blood pressure, and alleviate stomach and bowel ulcers, indigestion and constipation.
- Diversifying our protein supply will help us adapt as a species to issues like climate change, drought, and human over population.

Contact details: editor@inquisitr.com

95) **Source:** Waco Tribune, USA local news site (general audience), 14/3/2014 **Title:** *Bug bites: Wacoans learn the benefits of eating insects*

Link: <u>http://www.wacotrib.com/news/bug-bites-wacoans-learn-the-benefits-of-eating-insects/article_6d7389ac-c22f-5f06-adbc-0b8afd63bd54.html</u>

Summary of content:

- Neutral tone
- Little Herds is a non-profit group from Texas trying to promote entomophagy.
- The founder, Robert Nathan Allen, describes the nutritional and environmental benefits associated with eating insects.
- The downside is that people think bugs are gross but change could be coming sooner than you think. 20 years ago there was a similar stigma surrounding sushi and now it is readily available.
- Allen passed out toasted crickets to his audience at a recent event. The reviews were positive.

Contact details: Hollie O'Connor = <u>hoconnor@wacotrib.com</u>

96) **Source:** MSN news, USA news and entertainment site (general audience), 14/3/2014 **Title:** *Edible insects Europe's 'buzz' food*

Link: <u>http://news.msn.com/world/video?videoid=7e17f692-552d-406a-b6e7-</u> <u>dc8353269344&ap=true</u>

Summary of content:

- Positive tone
- A videographic explaining the benefits of entomophagy
- Insects are a healthy and nutritious alternative to meat and fish.
- Harvesting insects has both environmental and social benefits. It requires little investment and is suitable for poor, landless communities in urban areas.
- Farming insects can be a lucrative business. They are already starting to appear on the menu of high-end European restaurants.

Contact details: <u>MSNNewsExecutives@microsoft.com</u>

97) **Source:** The Connexion, French news site (general audience), 14/3/2014

Title: Insect menu 'lost us star'

Link: <u>http://www.connexionfrance.com/Insect-Aphrodite-menu-Michelin-David-</u> Faure-Alternative-Food-15559-view-article.html

Summary of content:

- Neutral tone
- French Chef, David Faure, has said that his insect-themed restaurant was to blame for him losing his Michelin star.
- He was told that it doesn't fit in with the criteria of the guide and of French gastronomy; that [he's] gone off course and need to start doing more 'normal' cuisine again.
- Mr Faure said he is involved in talks with food industry colleagues across Europe about promoting insects as food, and has no plans to stop using them.
- He uses them whole to create a surprise factor; he said the future is more likely to see increasing use of them ground up as flours.

Contact details: contact@connexionfrance.com

98) **Source:** Yahoo Australia, Lifestyle site (general audience), 14/3/2014

Title: Ten reasons why you should eat insects as food Link: <u>http://au.lifestyle.yahoo.com/food/galleries/photo/-/21977302/ten-reasons-you-should-eat-insects/21977316/</u>

- Positive tone
- Insects have been appearing on menus and it won't be long before they are available on the supermarket shelves.
- Food scientist and entomologist Skye Blackburn lists her top ten reasons why we should be eating insects.



- Reasons include: they are packed with essential nutrients, they are low in fat and high in protein, they need less water to farm, they require minimal space, they are energy efficient and they taste great.

Contact details: Skye Blackburn = <u>bug@ediblebugshop.com.au</u>

99) Source: Newser, USA news site (general audience), 14/3/2014

Title: India's Famine Solution: We'll Eat Bugs

Link: <u>http://www.newser.com/story/183770/indias-famine-solution-well-eat-</u> bugs.html

Summary of content:

- Neutral tone
- Indian scientists are experimenting with insects as an alternative source of protein.
- An FAO report notes bugs like caterpillars, termites, beetles, and grasshoppers have a high nutritional value that could match other kinds of meat.
- Large-scale insect farms will be needed.
- India's Dalit population previously ate insects out of compulsion if you ask them to return to eating insects they will 'tell you to go to hell'.
- The trend toward creepy-crawly meals is also starting to play out in the US.
- Contact details: Arden Dier = <u>ardendier@gmail.com</u>

100) **Source:** Swiss Info, Swiss news site (general audience), 14/3/2014 **Title:** *Creepy crawlies fed to Swiss politicians*

Link: http://www.swissinfo.ch/eng/swiss news/Creepy crawlies fed to Swiss politi cians .html?cid=38155486

Summary of content:

- Positive tone
- Swiss politicians were served mealworm hamburgers and grasshopper mousse at a recent lobbying event aimed at showing how tasty and nutritious insects can be.
- The FAO report is referenced.
- Many may react to the idea with disgust, insects make up a part of the traditional diets of about a billion people.
- A video accompanies the article. The reactions of the politicians were mixed e.g. 'not bad as long as you don't know what you're eating'.

Contact details: <u>http://www.swissinfo.ch/eng/index/Contact.html?cid=34097316</u>

101) **Source:** The Boston Globe, USA newspaper site (general audience),

16/3/2014

Title: *The joy of cooking insects*



Link: <u>http://www.bostonglobe.com/ideas/2014/03/15/the-joy-cooking-insects/732s4mXQ5obmD7I7gdIXoJ/story.html</u>

Summary of content:

- Positive tone
- An interview with Marcel Dicke one of the authors of *The Insect Cookbook: Food for a Sustainable* Planet which is published this month.
- The book's sumptuous photography and lovingly assembled recipes amount to an argument that this revulsion to eating insects is actually our loss.
- The nutritional benefits of insects are outlined and the flavours of some of the most common edible insects are described.
- Supermarkets don't stock insects at the moment but there will be a tipping-point and one day people will go to the shops for a fresh box of locusts or mealworms.

Contact details: Stephen Heuser (editor Ideas section) = <u>sheuser@globe.com</u>

102) Source: The Guardian Liberty Voice, USA news site (general audience),

17/3/2014

Title: Insects Provide Surprising Nutritional Benefits

Link: <u>http://guardianlv.com/2014/03/insects-provide-surprising-nutritional-benefits-</u>video/

Summary of content:

- Positive tone
- An overview of the nutritional profile of insects.
- They are high in protein and fatty acids. A third of termite's fat content is palmitoleic acid which is known to have anti-inflammatory effects.
- They are good for the environment due to their lower greenhouse gas emissions.
- They can aid countries suffering from malnutrition. Insects are being used to supplement less nutritious foods like grain that don't contain important amino acids.
- Experts have said that people should be careful about what insects they eat because if only one type is eaten, that species may be endangered.
- A video about the McGill team's edible insect company is part of the article.
 Contact details: Jordan Bonte = @Jrdnbnte20124 (twitter)

Source: Wired, USA technology news site (general audience), 17/3/2014
 Title: Out in the Open: Raise Your Own Edible Insects With This Free Kit
 Link: <u>http://www.wired.com/wiredenterprise/2014/03/open-bug-farm/</u>
 Summary of content:

- Positive tone
- Entomophagy is beginning to find solid-footing in the US and Europe. Edible insects are the hip new thing among the foodie crowd.



- The FAO report suggested that insects could be an increasingly important and sustainable food source in the future.
- Tiny Farms have created an Open Bug Farm a high tech kit that lets anyone raise their own edible insects for free.
- Each kit contains everything you need to start your own bug farm, including all the basic equipment, tutorials, and software, as well as a start insect herd.
- They have developed a web based community platform so that farmers can meet, share experiences, and discuss improvements to the design.

Contact details: Klint Finley = <u>me@klintfinley.com</u>

104) **Source:** The Local, English language French news site (general audience), 17/3/2014

Title: 'New insect menu cost me my Michelin star' Link: <u>http://www.thelocal.fr/20140317/insect-menu-cost-us-our-michelin-star</u> Summary of content:

- Neutral tone
- French chef David Faure has lost his Michelin Star for his restaurant in Nice. He believes it is because his menu included edible insect dishes.
- At the time, other chefs told him he was making a mistake by featuring insects.
- Despite the loss of his star, he will not change the way he does things.
- Other chefs in France are starting to incorporate insects in their dishes e.g.
 Sylvain Musquar makes chocolates topped with sugar-coated maggots or crickets.

Contact details: Ben McPartland = <u>ben.mcpartland@thelocal.com</u>

105) **Source:** All About You, UK women's interest magazine site (general audience), 17/3/2014

Title: Grasshopper taste test: creepy crawly tempura

Link: <u>http://www.allaboutyou.com/food/wisdom/edible-insects-grasshopper-</u>cooking-grasshopper

Summary of content:

- Positive tone
- The author of the article tries eating crickets for the first time.
- The idea that growing and eating insects as a viable option for easing food shortage is gaining credibility.
- The nutritious and environmental benefits are described.
- The author ordered a packet of freeze-dried insects from the company Grub and followed one of their online recipes.
- Whilst cooking, the smelled and looked like porcini mushrooms.
- Unexpectedly they were a hit 'bring on the bugs!'.

Contact details: editor@allaboutyou.com



106) **Source:** AgriNews, Spanish agriculture news site (specialist audience),

17/3/2014

Title: Using insects as a protein source in animal feed

Link: <u>http://agrinews.es/2014/03/17/uso-de-insectos-como-fuente-proteica-para-la-alimentacion-animal/</u>

Summary of content:

- Neutral tone
- An overview of the feasibility of insect protein in poultry and pig feed.
- The 3 species of insects that are most appropriate are the black soldier fly, the house fly and the yellow mealworm but processing techniques must be developed further.
- The issue surrounding current TSE legislation needs to be resolved.
- Insects have a promising nutritional value but there is a need to evaluate the nutrient digestibility of insects once 'processed' as a food ingredient.
- Production needs to be scaled up. To be a competitive alternative protein source, the maximum price as a food ingredient in the poultry and swine production should be between 1.00 - € 1.50.
- PROteINSECT is mentioned. The EU recognises the need to strengthen development in this area.

Contact details: http://agrinews.es/contacto/

107) **Source:** Cattle Network, USA beef cattle news site (specialist audience), 19/3/2014

Title: Commentary: Bugs vs. beef

Link: <u>http://www.cattlenetwork.com/Commentary--Bugs-vs-beef-</u>250973191.html?ref=191

- Positive tone
- Insects have been proposed as the solution for the challenge of feeding a growing world population. 'If you get past the gag factor, it's not such a crazy idea'.
- The environmental benefits of growing insects are mentioned as well as the nutritional advantages.
- Although there are rational arguments for it, the author of the article states that 'Gastronomically, there's no way I'm sitting down to a plate of mealworms, rather than a charbroiled steak.' The real potential is therefore using insects to feed to livestock.
- The author argues that the biggest benefit is that activists cannot stop this. They can hardly argue that insects are sentient creatures that have a right to live free



from pain and suffering. 'It would be fun to hear activists try to roll out the "don't eat creatures with a face" argument with mealworms and termites'. **Contact details:** info@cattlenetwork.com

108) Source: 4Utah, USA local news site (general audience), 20/3/2014 Title: Will sharks eat...crickets? Link: <u>http://www.4utah.com/story/d/story/will-sharks-</u> eatcrickets/37434/il7ibMPyLEC-W0EaL6BfbQ

Summary of content:

- Positive tone
- Chapul cricket energy bars will be featuring on the TV show *shark tank* (same format as *Dragons' Den*).
- The bar is available in over 100 retail outlets in the USA and distribution partners overseas are rapidly expanding.
- The environmental benefits of insects are explained high feed efficiency, lower land requirements and reduced greenhouse gas emissions.

Contact details: http://www.4utah.com/contact/news

109) Source: The Irish Times, Irish newspaper site (general audience), 21/3/2014 Title: 'Three-quarters' of public happy to eat animals fed on insects Link: <u>http://www.irishtimes.com/business/sectors/agribusiness-and-food/three-guarters-of-public-happy-to-eat-animals-fed-on-insects-1.1732516</u>

Summary of content:

- Neutral tone
- The preliminary results of the PROteINSECT survey are given.
- The FAO report is referenced.
- A spokesperson from the FAO says the consumer disgust is still one of the biggest barriers in the Western world but people would not have considered eating sushi 20 years ago.
- In blind food tastings, 9/10 people preferred meatballs containing 50% mealworms to those containing 100% meat.
- The FSA of Ireland has no plans to introduce insects for human consumption yet.
 Contact details: Alison Healy = <u>ahealy@irishtimes.com</u>

Source: The Guardian, UK newspaper site (general audience), 21/3/2014
 Title: Buffalo worm cupcakes: how insects can feed the world – in pictures
 Link: http://www.theguardian.com/books/gallery/2014/mar/21/worm-cupcakes-insects-feed-world-pictures

- Positive tone
- A photo gallery of Arnold van Huis' favourite insect recipes.



- Recipes include roasted grasshoppers, mealworm burgers and buffalo worm chocolate cupcakes.
- Insects are more efficient than cattle or pigs in terms of both land use and feed conversion, and are already an established food source for two billion people. They are the best food source at hand to meet future food demands.
 Contact details: Arnold van Huis = arnold.vanhuis@wur.nl
- 111) **Source:** Farmers Weekly, UK Agricultural industry news site (specialist audience), 22/3/2014

Title: *Free-range layers encouraged to eat more insects* **Link:** <u>http://www.fwi.co.uk/articles/22/03/2014/143859/free-range-layers-</u> encouraged-to-eat-more-insects.htm

Summary of content:

- Neutral tone
- The Soil Association has launched a project designed to increase insect consumption by free-range laying hens.
- Mealworms will be introduced to the hens' diet and placed on the range alive, to supplement the standard diet.
- Eggs will be collected at random and analysed for quality such as shell thickness, omega-3, omega-6 fatty acid and yolk colour – and a check kept on numbers produced.
- The project addresses a number of issues central to the future sustainability of free-range egg production including improving welfare, reducing feed consumption (and cost) and enhancing the nutritional quality of eggs.

Contact details: Philip Clarke = <u>Philip.clarke@rbi.co.uk</u>

112) **Source:** Farming UK, Agricultural industry news site (specialist audience), 24/3/2014

Title: Soil Association to fund innovative farmer-led research Link: <u>http://www.farminguk.com/News/Soil-Association-to-fund-innovative-farmer-led-research_29645.html</u>

Summary of content:

- Neutral tone
- The UK's Soil Association is funding three new projects to support sustainable agriculture.
- One project is titled 'Increasing insect consumption by laying hens in free range systems to reduce feed costs, enhance food quality and improve welfare'.
- The project is being led by Stonegate at their Sutton Estates farm in Newbury and researchers from the University of Bristol.

Contact details: Keith Wild (editorial) = 01484 400666



113) **Source:** Food Business News, International food industry news site (specialist audience), 24/3/2014

Title: A full plate of protein sources

Link: http://www.foodbusinessnews.net/articles/news home/Consumer Trends/20 14/03/A full plate of protein source.aspx?ID=%7B42C6163B-EA0A-4F1C-9F36-4DF454F695F4%7D&cck=1

Summary of content:

- Neutral tone
- Protein is a very popular food ingredient in America right now "Americans are gobbling up protein like it's their last days," Consumers assume that protein is good for you.
- Insect protein may become popular. A kilogram of grasshoppers has as much protein as ten hotdogs. Escamoles, a dish featuring ant eggs, may become a popular delicacy at restaurants.
- Insect protein sources are limited by taste, aroma and consumer squeamishness.
- Other protein sources discussed include collagen and algal proteins.

Contact details: @foodbiznews (twitter)

114) **Source:** The Times Colonist, Canadian local newspaper site (general audience), 24/3/2014

Title: *Victoria filmmakers put bugs on the movie menu* **Link:** <u>http://www.timescolonist.com/victoria-filmmakers-put-bugs-on-the-movie-menu-1.918907</u>

Summary of content:

- Neutral tone
- A Canadian film company is going to the Netherlands to shoot a documentary about using insects as a food source. The film is inspired by the FAO report on edible insects.
- They are travelling to Wageningen University to interview Arnold van Huis. The pair will then travel to South Africa, Zimbabwe and Botswana to film people who harvest caterpillars, grasshoppers and makeke for food. Finally, they will visit restaurants in San Jose and Santa Monica that are serving edible insect dishes.
- It will be a serious documentary. The film makers don't want to poke too much fun or make it about gross-out jokes.

Contact details: Michael Reid = <u>mreid@timescolonist.com</u>

115) **Source:** All About Feed, International feed industry news site (specialist audience), 25/3/2014

Title: *Boosting insects consumption in free-range layer diets* **Link:** <u>http://www.allaboutfeed.net/Nutrition/Research/2014/3/Boosting-insects-</u> <u>consumption-in-free-range-layer-diets-1487960W/</u>



Summary of content:

- Neutral tone
- An overview of the Soil Association's project looking at increasing insect consumption by free-range laying eggs.

Contact details: Emmy Koeleman (Editor) = <u>emmy.koeleman@reedbusiness.nl</u>

116) **Source:** Men's Journal, USA men's lifestyle magazine site (general audience), 25/3/2014

Title: A Bug Dish for Insect Cooking Beginners **Link:** <u>http://www.mensjournal.com/food-drink/recipes/a-bug-dish-for-insect-</u> <u>cooking-beginners-20140325</u>

Summary of content:

- Positive tone
- Entomophagy has become more trendy than taboo. At least 30 restaurants in the USA have insects on the menu intentionally.
- The benefits of entomophagy from the FAO report are mentioned.
- It has become much easier to buy pre-prepared, kitchen-ready insects.
- There are many simple bug recipes. David George Gordon, author of the *Eat-a-Bug Cookbook* shares the recipe for his signature dish, Orthopteran Orzo.

Contact details: https://www.letters@mensjournal.com

117)Source: JS China, Chinese local news site (general audience), 26/3/2014Title: Thai-style insect feast stuns visitors in Suzhou

Link: http://english.jschina.com.cn/TodayJiangsu/201403/t1433951.shtml

Summary of content:

- Neutral tone
- A Thailand-style insect feast was available to the public at the 6th Suzhou Food Culture Festival.
- All edible-insects were raise artificially in Thailand. They are non-poisonous and contain more protein than ordinary fish and meat products.
- There is a photo gallery showing the spiders, scorpions, centipedes and silkworm chrysalis on offer at the festival.

Contact details: english@jschina.com.com

118) **Source:** Fast Company, USA innovation magazine site (general audience), 26/3/2014

 Title: Inside The Emerging World Of Insect Cuisine

 Link: http://www.fastcoexist.com/3028228/inside-the-emerging-world-of-insect-cuisine

 cuisine

Summary of content:

- Positive tone



- Bugs are coming to your plate. Marcel Dicke has released The Insect Cookbook to make them accessible and delicious for people to enjoy at home.
- Dicke explains the environmental benefits associate with entomophagy as well as the flavours of some insects.
- Some chefs are embracing insect favours. Noma, a 2-Michelin-starred restaurant in Denmark serves live ants on its menu.
- It seems that the materials the insects are fed on are important in determining their flavour.
- Getting people to overcome the ick-factor is a big challenge. A survey has shown that people object most to eating cockroaches but have the fewest objections to eating ants. The full results of this survey will be presented at the Wageningen conference.

Contact details: media@fastcompany.com

119) **Source:** Canada AM, Canadian morning news TV show (general audience), 26/3/2014

Title: *Beetles for breakfast? Montreal students promote insects as protein* **Link:** <u>http://canadaam.ctvnews.ca/beetles-for-breakfast-montreal-students-promote-insects-as-protein-1.1746900</u>

Summary of content:

- Positive tone
- The Aspire Food Group from McGill University is working to bring more insect foods to more of the world.
- If insects seem disgusting, remember that 20 years ago so did sashimi and 100 years ago lobsters were considered garbage fish.
- The team has created a business plan that includes plans to distribute "microlivestock" growing kits to allow insect farmers to raise bugs in controlled conditions all-year round.
- They also have a plan to take some of the harvested insects and grind them into a high-protein flour. Other food products include cricket snacks, such as roasted pepper and lime cricket chips.
- They'd like to be able to feed 20 million people by 2018.

Contact details: Angela Mulholland = @AngeMulholland (twitter)

120) **Source:** World Poultry, International poultry industry news site (specialist audience), 27/3/2014

Title: Boosting insects consumption in free-range layer diets **Link:** <u>http://www.worldpoultry.net/Layers/Nutrition/2014/3/Boosting-insects-</u> <u>consumption-in-free-range-layer-diets-1487965W/</u>

Summary of content:

Neutral tone



- An overview of the Soil Association's project focused on increasing insect consumption in free-range laying hens.

Contact details: Fabian Brockotter (editor) = <u>fabian.brockotter@reedbusiness.nl</u>

121) **Source:** Stockhouse, International small cap investment news site (specialist audience), 28/3/2014

Title: *Innovative Technology Upcycles and Recaptures Food Nutrients* **Link:** <u>http://www.stockhouse.com/news/press-releases/2014/03/27/enterra-feed-</u> *raises-5-million-for-new-langley-facility-launches-enterra-natural*

Summary of content:

- Neutral tone
- Enterra Feed has secured \$5million funding from Avrio Capital a fund that invests in innovative food and agricultural companies.
- Enterra rear insects on pre-consumer food waste to create natural protein, oils and fertiliser.
- The funding will be used to complete development of the first commercial-scale pilot facility.
- Enterra plans to expand to other agricultural and food production areas throughout Canada and the U.S

Contact details: editors@stockhouse.com

122) **Source:** The Boston Herald, USA local newspaper site (general audience), 29/3/2014

Title: Startup chirps over buggy food Link:<u>http://bostonherald.com/business/business markets/2014/03/startup chirps</u> over buggy food

Summary of content:

- Positive tone
- SixFoods is aiming to get people familiar with the idea of insets as ingredients.
- People are much happier to eat insects when they aren't in their original form.
- On April 21, the company will launch a Kickstarter crowdfunding campaign to raise \$30,000 to hire a contract manufacturer to make their first product, Chirps, or cricket chips.

Contact details: Marie Szaniszlo = @MarieSzaniszlo (twitter)

123) **Source:** Undercurrent News, International Aquaculture news site (specialist audience), 31/3/2014

Title: Startup to push for insect feed development with €2m funding Link: <u>http://www.undercurrentnews.com/2014/03/31/startup-to-push-for-insect-feed-development-with-e2m-</u>



<u>funding/?utm_source=rss&utm_medium=rss&utm_campaign=startup-to-push-for-insect-feed-development-with-e2m-funding</u>

Summary of content:

- Neutral tone
- The insect biotech start-up, Ynsect, plans to invest €2 million in fresh funds in a new R&D program.
- The grant will be used to upgrade the pilot plant set up at their new offices in Genopole, Paris.
- President Antoine Hubert says "The support of the French authorities and private investors few weeks are very significant signals for our new industry. We believe it is a strong signal showing that the industry recognizes and understands the market potential of insect biotech."

Contact details: Alicia Villegas = <u>Alicia.villegas@undercurrentnews.com</u>