

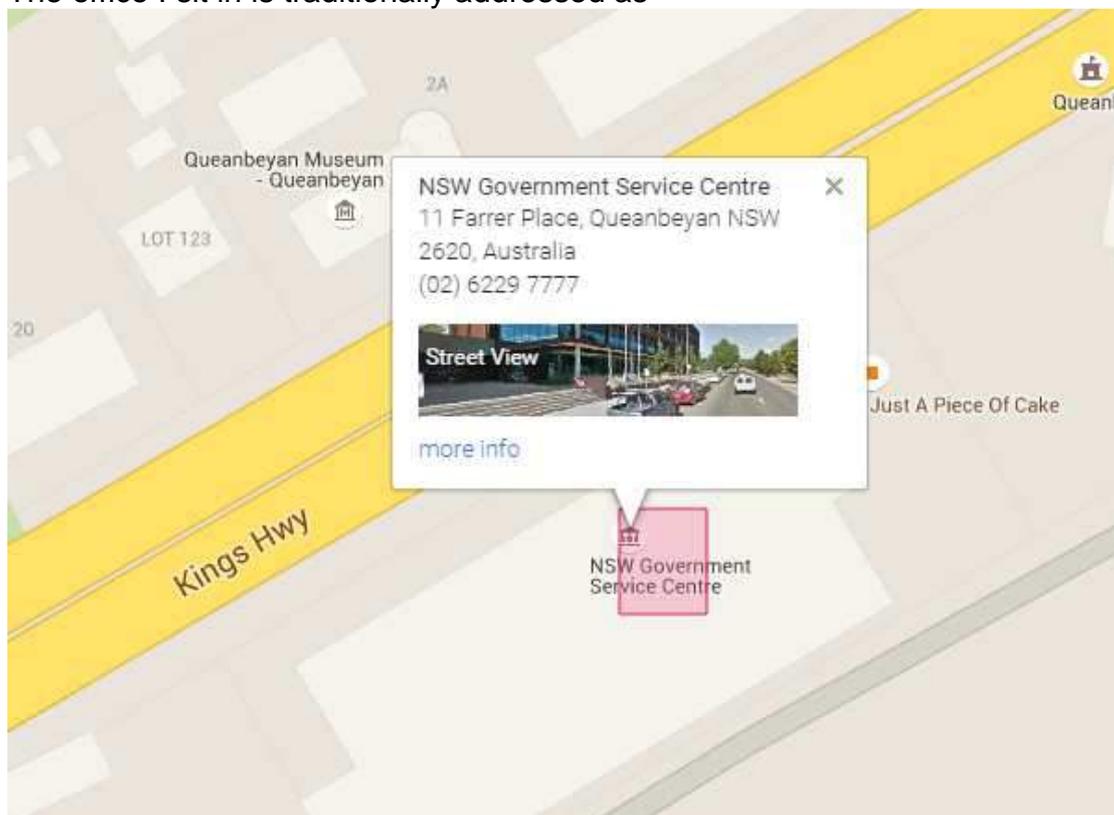


Hi All,

Google maps has a new ability to search on plus-codes (<http://google-latlong.blogspot.com.au/2015/08/plus-codes-new-way-to-help-pinpoint.html>).

If you enter this code into the search box, Google Maps will zoom into the location the code refers to. Very useful for places that don't have a specific street address. I expect courier companies will start using these at some point.

The office I sit in is traditionally addressed as



The plus-code is **4RPFJ6VJ+VC**

Cheers

Brian

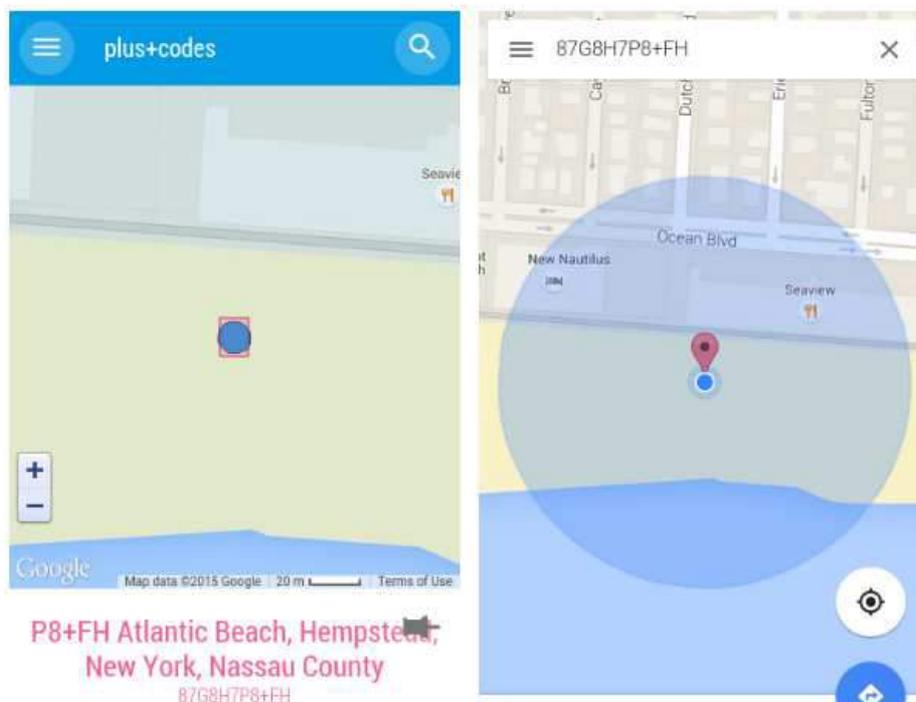
Plus codes: A new way to help pinpoint places on the map

Posted: Wednesday, August 12, 2015



The Adventure Crafts Glassmart in Kibera, Kenya, has the address: Stall No. 164, Makina Stalls, Kibera Drive, Located close to the Toi Market. There is no traditional address system in Kibera, so no easy number-and-street identifier. Nothing easy to plug into your phone. So, say you wanted to visit the shop: How would you go about finding it?

Last April we released a new system to help provide an address for every location in the world, called [Open Location Code](#) (OLC, also known as "plus codes"). Today, plus codes are now searchable on Google and Google Maps. Plus codes are a useful way of representing locations that don't have specific street addresses. But it's not just in less developed places like Kibera. For example, an area the size of a few beach blankets on Atlantic Beach would have the plus code [87G8H7P8+FH](#). If you're hoping to tell some friends where to meet you on the beach -- and they are near Atlantic Beach or looking up the specific location in Google Maps while zooming in over it -- you can give them just the last four digits "P8+FH" to help them find you. You can find the plus code for your location at <http://plus.codes>.



<http://google-latlong.blogspot.com.au/2015/08/plus-codes-new-way-to-help-pinpoint.html>

Invitation to the upcoming 2016 AUSTRALIAN REGOLITH GEOSCIENCE ASSOCIATION (ARGA) CONFERENCE

The fourth Australian Regolith Geoscientists Association Conference will be held in Thredbo, NSW from 7th-10th February 2016. Please mark the dates in your diaries and check the website (www.regolith.org.au/conference2016.html) for regular updates.

Please feel free to forward this invitation to any interested colleagues.

I look forward to seeing you in Thredbo!

**Regards
Matilda Thomas
2016 ARGA Conference organiser**



ARGA invites you to the 4th biennial
Australian Regolith Conference,
Thredbo, NSW Snowy Mountains.

7th – 10th Feb 2016

- 3 day (Mon-Wed) national multi-disciplinary sessions on all regolith related topics
- Free networking BBQ: Sunday 7th Feb
- Field trips (including travelling to/from Canberra)
- National cover-related science discussions, future planning and publication support
- Student bursaries and awards available

<http://regolith.org.au>

Contact: secretary@regolith.org.au

(To Book Member only prices on Events please log in and go to 'My Events')

Book Event

2015 WA - Celebrating Soils 2015

Celebrating Soils 2015

Date and Time: 7/09/2015 - 9/09/2015

Venue: Atrium Hotel

Select Ticket Type

Ticket Type	Amount Inc.Tax	Select
2-Day Conf, 1/2 Day Field Trip, Conference Dinner	Varied Pricing	<input type="radio"/>
1-Day Conference only	Varied Pricing	<input type="radio"/>
2-Day Conference only	Varied Pricing	<input type="radio"/>
1/2 day field trip – boat trip only (Single Ticket)	\$37.00	<input type="radio"/>
Conference Dinner (Single Ticket)	\$67.00	<input type="radio"/>

The 2015 Conference is the major Soil Science Australia (WA branch) event for the "International Year of Soils 2015". The theme of the conference is "Celebrating Soils 2015". As part of the conference we aim to celebrate the successful soil management practices which have contributed to the sustainability and profitability of land use in Western Australia. The full Conference package includes presentations, a field trip and the annual WA Boodja Soil Science lecture. The conference is preceded by a weekend Soil Judging Competition open to university students.

Conference details

Full Conference detail for 7-9 September 2015 is contained at the following blog site

<http://www.soilscienceaustralia.com.au/component/content/category/43-wa-state-conference-blog?layout=blog>

The direct link to the event booking is:

<https://soilscienceaustralia.memnet.com.au/MemberSelfService/EventBooking.aspx?selectedEventId=37>

national science week

15–23 August 2015



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Australia's annual celebration of Science

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LATEST NEWS & TWEETS

[Inaugural TASTroFest huge success!](#)

[Message from the Lord Mayor of Melbourne](#)

[Galaxy Explorer](#)

RT @PlantCellWalls: Wondering where to find out about Science events? Check the new #Scimex Events Calendar <http://t.co/rroj2HNYj8> ^NK <https://t.co/vhFueqwt4R>, 7 mins ago



TODD HEARTS SCIENCE



Todd Sampson, CEO of Leo Burnett Australia, is an accomplished science communicator and a Science Week ambassador.

CLASSIFY A GALAXY FAR, FAR AWAY...



Calling citizens of Earth – we need citizen scientists to sign up and help astronomers classify over 200 000 images of galaxies that are 800 million to 4 billion light years away. Take part and you could win a wi-fi telescope. Teachers can also register their school group.

<http://www.scienceweek.net.au/>

Greenland ice sheet's winds driving tundra soil erosion, study finds

12 August 2015



Ruth Heindel, a Ph.D. student in Dartmouth's Department of Earth Sciences, and her colleagues found that winds blowing off the Greenland Ice Sheet are eroding soil and vegetation in the surrounding tundra. Credit: Ruth Heindel

Strong winds blowing off the Greenland Ice Sheet are eroding soil and vegetation in the surrounding tundra, making it less productive for caribou and other grazing animals, carbon storage and nutrient cycling, a Dartmouth College study finds.

Read more at: <http://phys.org/news/2015-08-greenland-ice-sheet-tundra-soil.html#jCp>

Living organisms, big and small, rely on soils for survival



Bacterial-feeding nematodes such as this Acrobeles are common inhabitants of agricultural soil. The actual length of this nematode is less than 1 millimeter.

5 August 2015 1:00 pm

MANHATTAN, Kan. — Above ground, life is apparent. Green plants, colorful flowers, animals and even insects show activity in our daily lives — so much so that people probably don't give thought to life below the earth's surface. Life in the soil helps make the living items seen above the surface possible.

Larger animals may rely on soil for shelter. Insects and plants rely on it for nutrients. Microbes — tiny organisms such as bacteria, viruses or fungi that require a microscope to see — even call soil their home.

http://www.midwestproducer.com/news/livestock/living-organisms-big-and-small-rely-on-soils-for-survival/article_9d601670-3ba9-11e5-bf44-5713d174735a.html

Clearing habitat surrounding farm fields fails to reduce pathogens

August 10, 2015



A farming landscape can be co-managed for both produce safety and nature conservation. Promising practices include: (1) planting low-risk crops between leafy-green vegetables and pathogen sources, such as grazeable lands, (2) buffering farm ...[more](#)

The effort to improve food safety by clearing wild vegetation surrounding crops is not helping, and in some cases may even backfire, according to a new study led by researchers at the University of California, Berkeley.

Read more at: <http://phys.org/news/2015-08-habitat-farm-fields-pathogens.html#jCp>

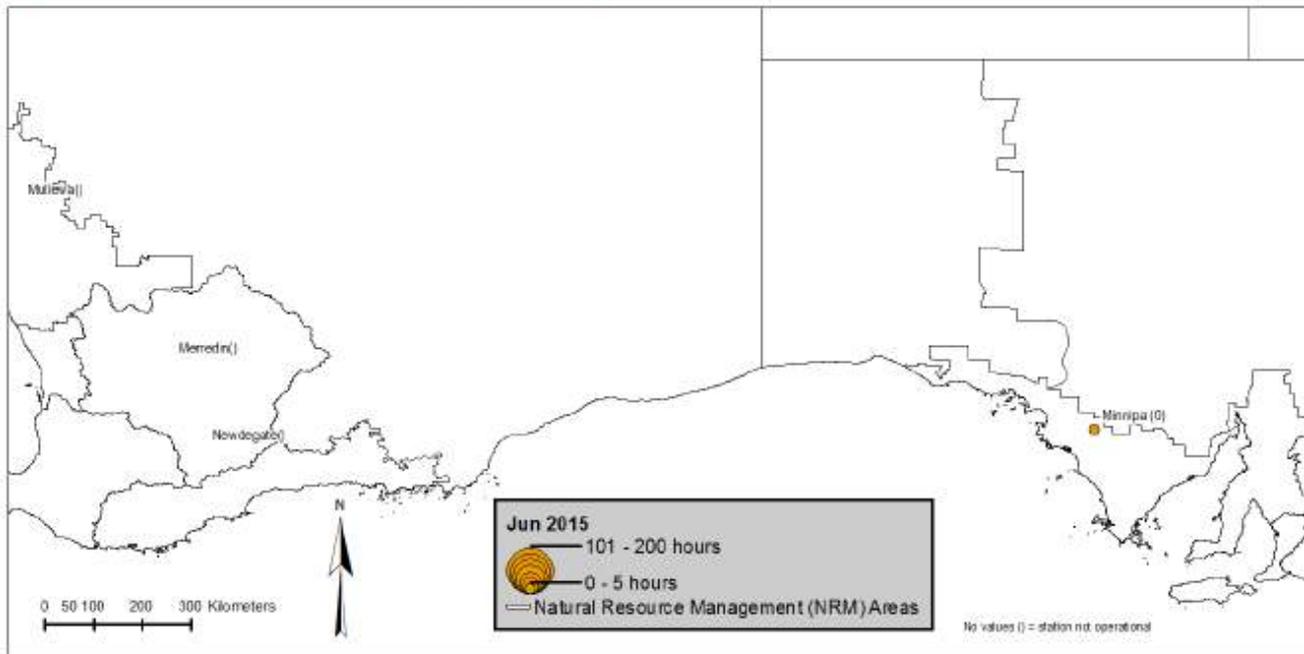
DustWatch Report – June 2015

Dust activity – no dust to report across all sites.
Wind strength – 50% less than last month; 40% less than June last year.
Groundcover – increases across the board.
Rainfall – substantial in NSW, eastern SA and southern QLD.
Land Management – emerging crops and growing pastures protecting the soil.

Dust activity

A combination of wet and cold weather, much less than average wind strength and the emerging crops protecting the soil in the wheat/sheep belt has led to a

Figure 1. Hours of dust (number in brackets) with visibility less than 10 km recorded at each DustWatch site in June 2015



DustWatch Report June 2015

<http://www.environment.nsw.gov.au/resources/dustwatch/150529DWNL.pdf>

Humanity exceeds nature's budget for 2015

13 August 2015



13 August 2015 is Earth Overshoot Day. Credit: NASA

In less than eight months, humanity has used up nature's budget for the entire year, according to data from Global Footprint Network.

Read more at: <http://phys.org/news/2015-08-humanity-nature.html#jCp>

Protecting our crucial soils

Friday, 7 August 2015, 4:13 pm

Column: [Bala TikkiSETTY Waikato Regional Council](#)

Protecting our crucial soils

Bala TikkiSETTY

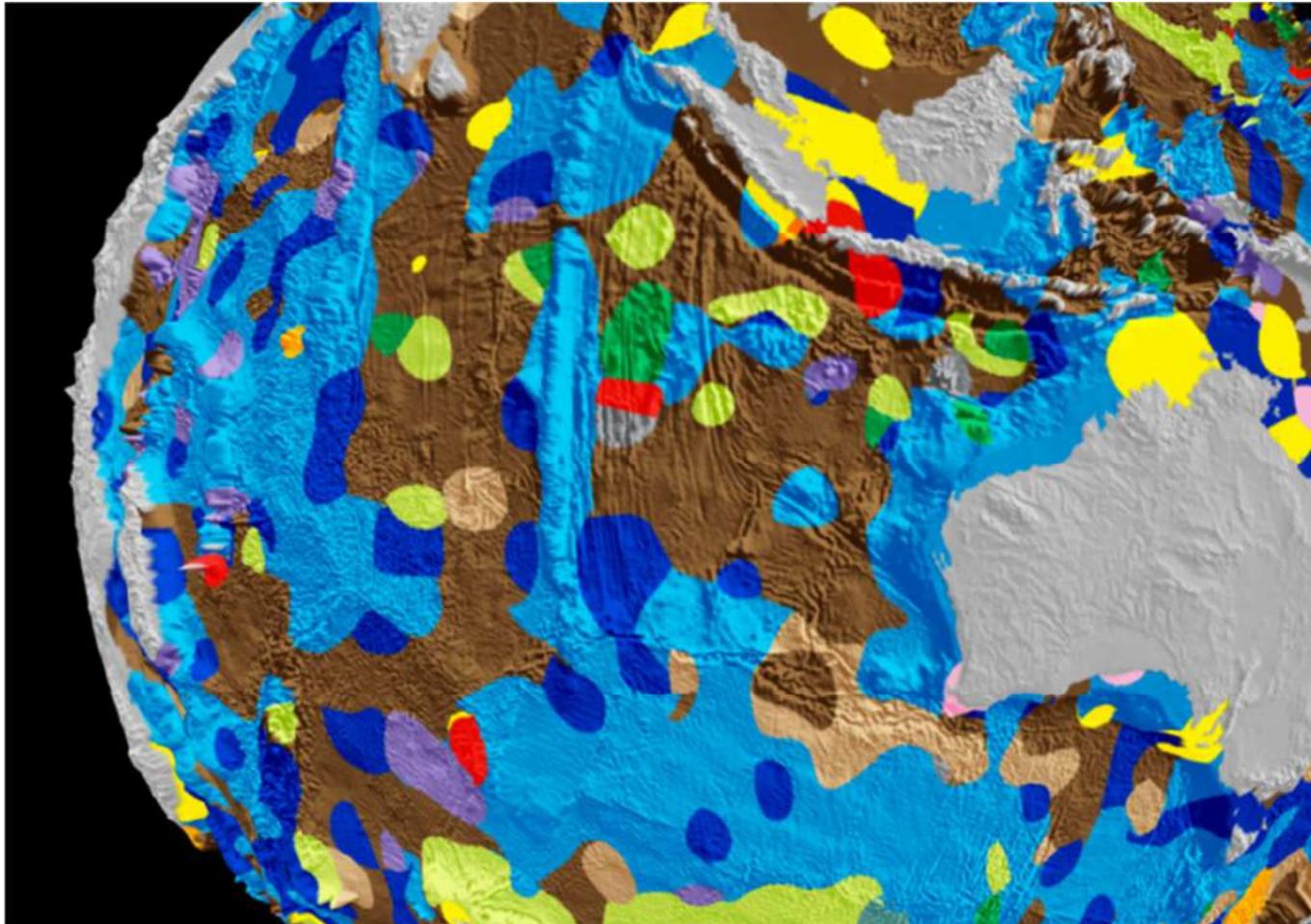
Good soils are at the heart of agricultural enterprise in the Waikato region.

Waikato Regional Council's soil quality monitoring programme measures soil properties such as soil compaction, nutrient status, biological activity, soil carbon and organic matter at 152 sites, with about 30 sites sampled annually. The sites cover a range of soils supporting various land uses.

The main soil quality issues identified are compaction, excessive phosphorous and nitrogen (N) on dairy and cropping land, and declining carbon, mainly on cropping land. <http://www.scoop.co.nz/stories/SC1508/S00015/protecting-our-crucial-soils.htm>

Big data maps world's ocean floor

10 August 2015



A still shot of the world's first digital map of the seafloor's geology. Credit: EarthByte Group, School of Geosciences, University of Sydney, Sydney, NSW 2006, AustraliaNational ICT Australia (NICTA), Australian Technology Park, Eveleigh, NSW 2015, Australia

Scientists from the University of Sydney's School of Geosciences have led the creation of the world's first digital map of the seafloor's geology.

Read more at: <http://phys.org/news/2015-08-big-world-ocean-floor.html#jCp>

Davidsonville's Vineyard at Dodon building soil to grow business



Wine is poured at an open house event at the Vineyards at Dodon, a new winery on the historic Dodon Farm in Davidsonville. (By Joshua McKerrow / Baltimore Sun Media Group)

By **[E.B. Furgurson III](#)** pfurgurson@capgaznews.com ***[contact the reporter](#)***
Maryland wines take a bow

A day in the country, a glass of wine, good food, music.

Dodon 'til Dusk also offered a bit of education — about the land, the vineyard and winemaking.

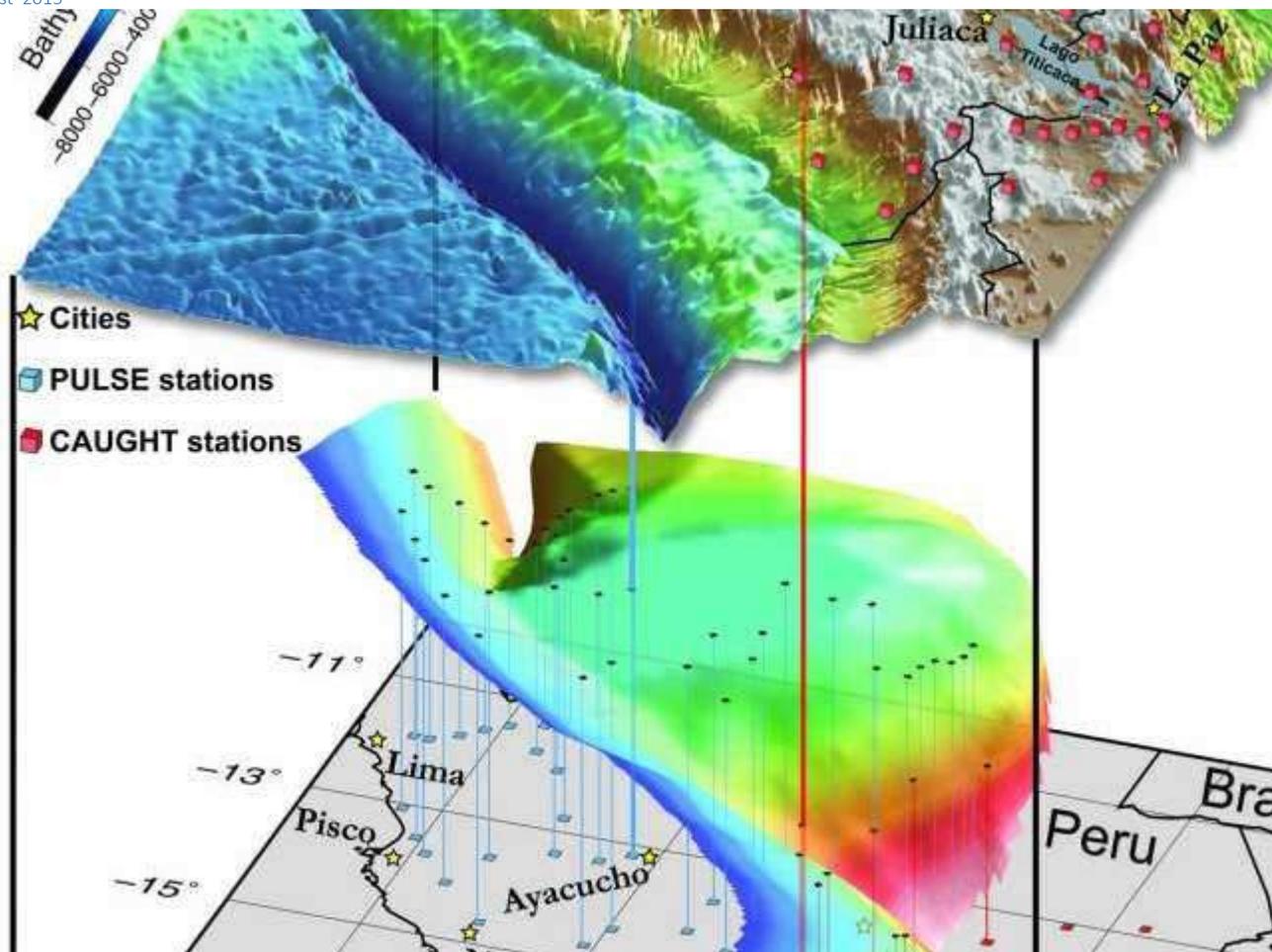
The summer event was held last week at The Vineyards at Dodon, a five-year-old winery in Davidsonville that is owned by Polly Pittman

and Tom Croghan. Pittman grew up at historic Dodon Farm, founded in 1725, and is the eighth generation of her family on the land.

<http://www.capitalgazette.com/news/ph-ac-cn-dodon-vineyard-0728-20150804-story.html>

South American example illustrates Rocky Mountain formation

12 August 2015



The revised geometry of the downgoing Nazca plate beneath the Andean mountains in southern Peru and northern Bolivia. Seismic stations are shown as colored cubes. Vertical lines show the location of these stations projected onto the slab. Credit: Lara Wagner.

New work from an international team of researchers including Carnegie's Lara Wagner improves our understanding of the geological activity that is thought to have formed the Rocky Mountains. It is published by *Nature*.

Read more at: <http://phys.org/news/2015-08-south-american-rocky-mountain-formation.html#jCp>

Finding out about the "hidden uses" of soil data



“Many people may be aware of these assessments and use them in their everyday work. However, how well do they appreciate that soils are an important component of these assessments?”

A Macaulay Development Trust funded PhD student, based between the James Hutton Institute and Cranfield University, is seeking information from individuals and organisations about their utilisation of soils data, in a drive to improve decision-making, planning and policy development. <http://www.hutton.ac.uk/news/finding-out-about-hidden-uses-soil-data>

Trusty, not rusty, pipelines owe a debt to space

13 August 2015



The International Space Station with ATV-2 and Endeavour. Credit: ESA/NASA

When a Dutch company working on soil pollution teamed up with ESA to build a better, bacteria-based air filter for space, they also created the foundation for a new way of keeping iron pipelines from corroding in the ground.

Read more at: <http://phys.org/news/2015-08-trusty-rusty-pipelines-debt-space.html#jCp>



You are here: [Web Soil Survey Home](#) / [Tips and Shortcuts](#)

Tips and Shortcuts

Here are some tips that will make your use of Web Soil Survey more effective and enjoyable.

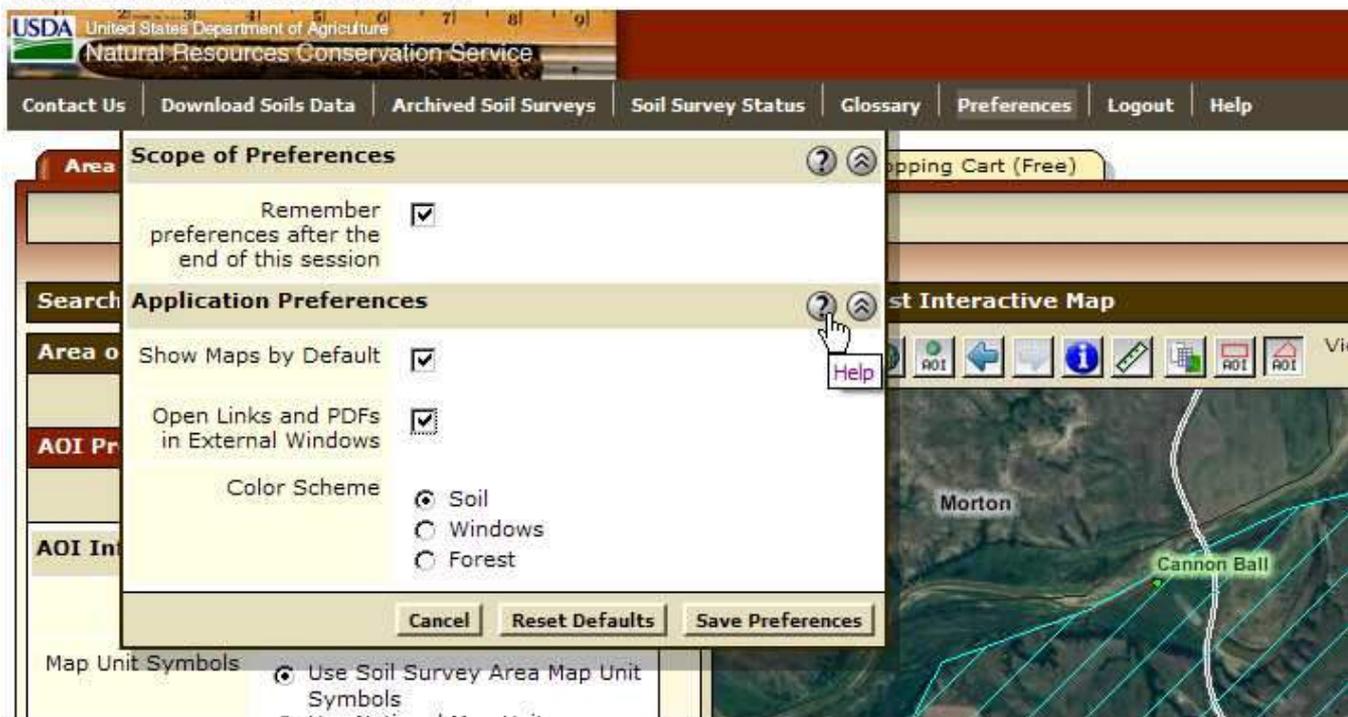
Solve Web Soil Survey problems by refreshing the browser

If you receive an error message, retry the operation, or press the browser's **Refresh** or **Reload** button. Many times this will solve the problem.

If not, contact the Hotline through the **Contact Us** link in the main application navigation bar.

Preferences

Web Soil Survey has a number of preference settings that can have a big effect on its usability. Open the Preferences pane by clicking the **Preferences** link on the main application navigation bar, and examine the options. The Preferences are all described in detail in the Preferences panel online help.



Start over after beginning to define a rectangle or polygon AOI

While drawing a rectangle AOI on the map, if you realize you started in the wrong place, you can start over by pressing the **Esc** key (Esc) without lifting the mouse button.

While drawing a polygon AOI on the map, if you draw a point in the wrong place, you can start over by pressing the **Escape** key (Esc) at any time before completing the polygon.

Finding the date of aerial photographs

Cover Crops and No-Till Help South Dakota

Posted by Colette Kessler, Natural Resources Conservation Service, South Dakota



NRCS helps farmers and ranchers to better understand and use soil data through soil testing to the new Haney Soil Test.

Demand for fresh lamb from five star restaurants drives Bob Corio's forages that provide feed but also build organic matter in the fields in South Dakota.

"We needed something else for our sheep to eat other than hay," says Corio, who has sheep and a herd of Dexter heritage breed cattle on their farm outside

<http://blogs.usda.gov/2015/08/05/cover-crops-and-no-till-help-south-dakota-lamb-farmer/>

Glacial earthquakes may help forecast sea-level rise

12 August 2015 by Kevin Krajick



A rift opens near the front of Greenland's Helheim glacier. Credit: Meredith Nettles

It is only recently that scientists learned of the existence of glacial earthquakes—measurable seismic rumblings produced as massive chunks fall off the fronts of advancing glaciers into the ocean. In Greenland, these quakes have grown sevenfold over the last two decades and they are advancing northward, suggesting that ice loss is increasing as climate warms. But exactly what drives the quakes has been poorly understood. Now, a new study elucidating the quakes' mechanics may give scientists a way to measure ice loss remotely, and thus refine predictions of future sea-level rise. The study appears this week in the early online edition of the leading journal *Science*.

Read more at: <http://phys.org/news/2015-08-glacial-earthquakes-sea-level.html#jCp>

International Year of Soils

August 2015

Just What the Doctor Ordered

https://www.youtube.com/watch?v=1zHxBHMJAG8&index=9&list=PL4J8PxoprpGZ3gPDXRfa_DNBYXoF-ruG2

Potato Grower Improves Operations From Soil to Store

Posted by Beverly Moseley, Natural Resources Conservation Service, Texas, on August 7, 2015 at 4:00 PM



Sheldon Rockey, co-owner of White Rock Specialties of Mosca, Colorado.

What do you get when you combine an abandoned rural high school, two Colorado farm families and potatoes? White Rock Specialties.

The innovative potato packing facility in Mosca, Colorado, is an economic driver for valley potato growers and employment in this small, unincorporated community in the San Luis Valley.

<http://blogs.usda.gov/2015/08/07/potato-grower-improves-operations-from-soil-to-store/>

Researchers explain why the Greenwich prime meridian moved

11 August 2015



The Airy meridian marked as the “Prime Meridian of the World” (dotted line), and the modern reference meridian indicating zero longitude using GPS (solid line). Credit: Imagery © 2014 Google Maps, Infoterra Ltd. & Bluesky

In 1884, a delegation of international representatives convened in Washington, D.C. to recommend that Earth's prime meridian (the north-south line marking zero degrees longitude) should pass through the Airy Transit Circle at the Royal Observatory in Greenwich, England.

Read more at: <http://phys.org/news/2015-08-greenwich-prime-meridian.html#jCp>

Soil scientists enthusiastic about future of

ABC Rural By [Sarina Locke](#)

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Updated 23 Jul 2015, 2:14pm

We are halfway through the International Year of Soil, and Australian soil scientists are brimming with enthusiasm, a contrast to the doomsayers.

The World Food and Agriculture Organisation issued a warning that the world's soils have only 60 years of harvests left, because they are becoming degraded.

The local soil scientists brush that off, arguing improvements in areas like soil carbon will produce longer lasting and healthier soils.

While it takes 1,000 years to make three centimetres of topsoil, a house or a highway will destroy it in a year.

<http://www.abc.net.au/news/2015-07-23/soil-scientists-enthusiastic-for-progress-on-soil-carbon/6642288>



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MAP: [Syd](#)



USDA NRCS
@USDA_NRCS



"Soil Health To-Go" Podcasts! Take a listen 1.usa.gov/1IVmj1A
pic.twitter.com/w9RWHBLZL9

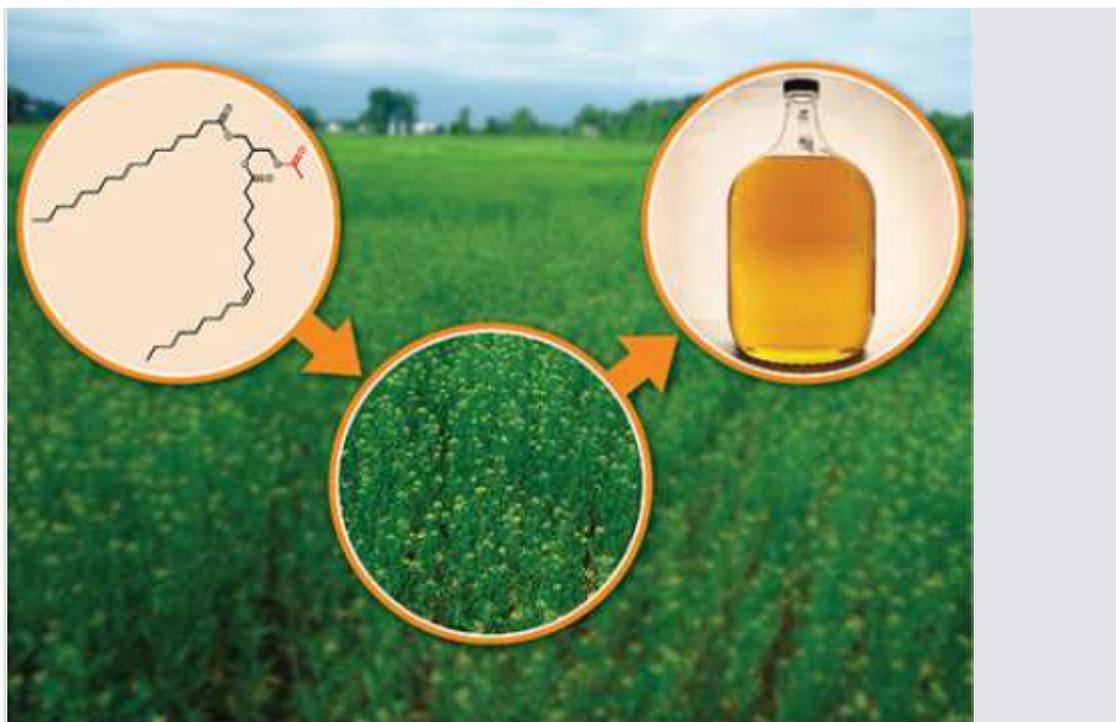
12:08 PM - 7 Aug 2015

SOIL HEALTH

to go



Biochemist studies oilseed plants for biofuel, industrial development



A Kansas State University biochemist is studying *Camelina sativa* — a nonfood oilseed crop — to see how it can be used for biofuel or even industrial and food-related applications.

Credit: Photo credit: Matt Wisniewski, GLBRC | Photo copyright: Plant Biotechnology Journal

A Kansas State University biochemistry professor has reached a milestone in building a better biofuel: producing high levels of lipids with modified properties in oil seeds.

Journal References:

1. Jinjie Liu, Adam Rice, Kathleen McGlew, Vincent Shaw, Hyunwoo Park, Tom Clemente, Mike Pollard, John Ohlrogge, Timothy P. Durrett. **Metabolic engineering of oilseed crops to produce high levels of novel acetyl glyceride oils with reduced viscosity, freezing point and calorific value.** *Plant Biotechnology Journal*, 2015; 13 (6): 858 DOI: [10.1111/pbi.12325](https://doi.org/10.1111/pbi.12325)
2. Jinjie Liu, Henrik Tjellström, Kathleen McGlew, Vincent Shaw, Adam Rice, Jeffrey Simpson, Dylan Kosma, Wei Ma, Weili Yang, Merissa Strawsine, Edgar Cahoon, Timothy

P. Durrett, John Ohlrogge. **Field production, purification and analysis of high-oleic acetyl-triacylglycerols from transgenic *Camelina sativa*.** *Industrial Crops and Products*, 2015; 65: 259 DOI: [10.1016/j.indcrop.2014.11.019](https://doi.org/10.1016/j.indcrop.2014.11.019)

<http://www.sciencedaily.com/releases/2015/08/150813123053.htm>



USDA NRCS
@USDA_NRCS



Hope in healthy soil bit.ly/1giQIRa pic.twitter.com/cGEQEuk1YQ

9:08 AM - 7 Aug 2015



https://mobile.twitter.com/USDA_NRCS/status/629685524475711488/photo/1

Soils Are Living

By RFD-TV News Staff



Soil

July 21, 2015

NASHVILLE, Tenn (RFD-TV) It's the International Year of Soils, and this month's theme is "soils are living." Learn about nematodes—organisms that call the ground home. Watch the video above for details.

<http://www.rfdtv.com/story/29597370/soils-are-living>

Heat release from stagnant deep sea helped end last Ice Age



This is a calving ice sheet in Spitzbergen.

Credit: David Thornalley

The build-up and subsequent release of warm, stagnant water from the deep Arctic Ocean and Nordic Seas played a role in ending the last Ice Age within the Arctic region, according to new research led by a UCL scientist.

The study, published today in *Science*, examined how the circulation of the ocean north of Iceland -- the combined Arctic Ocean and Nordic Seas, called the Arctic Mediterranean -- changed since the end of the last Ice Age (~20,000-30,000 years ago).

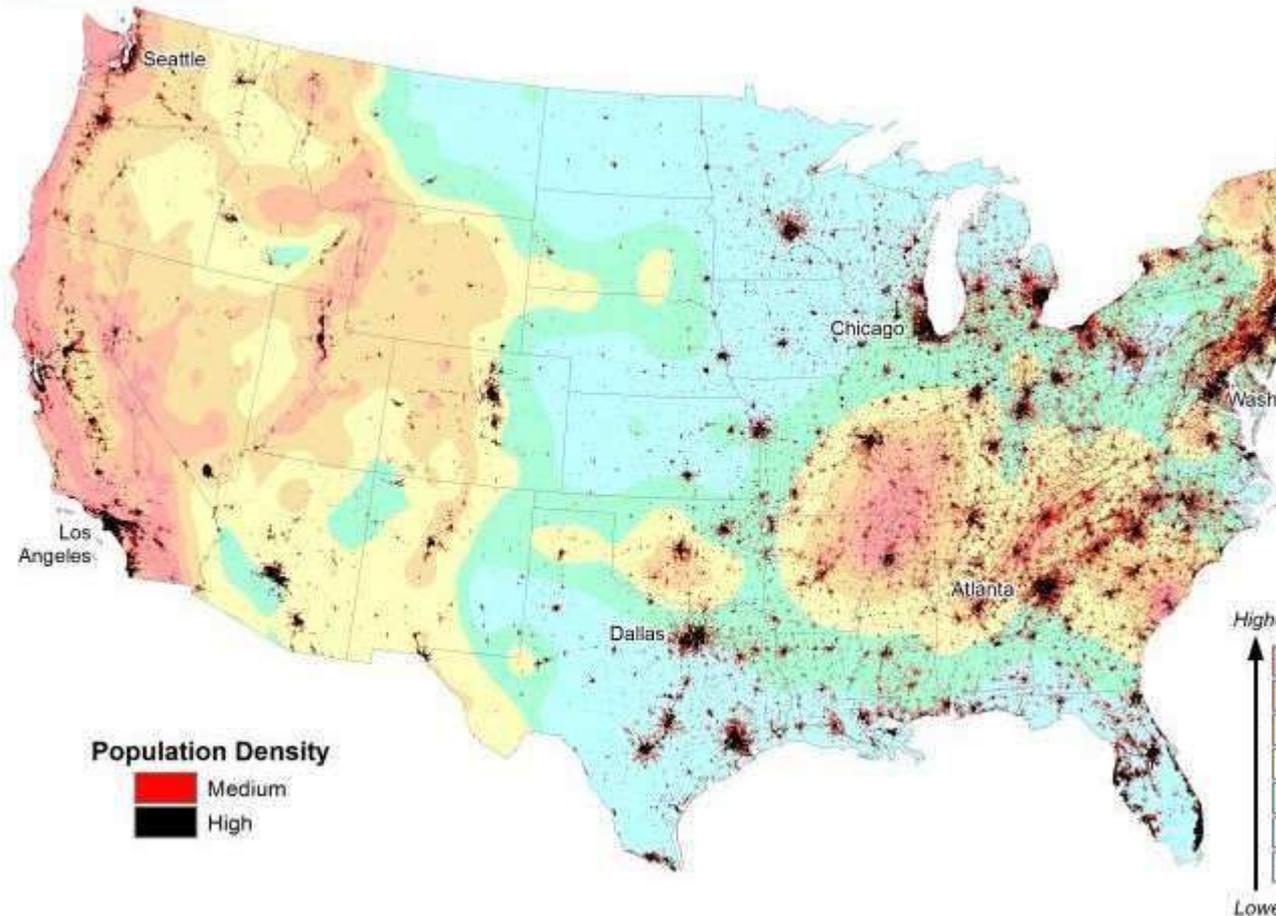
Journal Reference:

1. D. J. R. Thornalley, H. A. Bauch, G. Gebbie, W. Guo, M. Ziegler, S. M. Bernasconi, S. Barker, L. C. Skinner, and J. Yu. **A warm and poorly ventilated deep Arctic**
<http://www.sciencedaily.com/releases/2015/08/150813142713.htm>

Nearly half of Americans exposed to potentially damaging earthquakes

12 August 2015

science for a changing world



USGS map showing (1) the locations of major populations and (2) the intensity of potential earthquake ground shaking that has a 2% chance of occurring in 50 years.

More than 143 million Americans living in the 48 contiguous states are exposed to potentially damaging ground shaking from earthquakes. When the people living in the earthquake-prone areas of Alaska, Hawaii and U.S. territories are added, this number rises to nearly half of all Americans.

Read more at: <http://phys.org/news/2015-08-americans-exposed-potentially-earthquakes.html#iCp>

Tree domination of the world's savannas may slow down

12 August 2015



Savannas are becoming increasingly woodier as trees gain the upper hand over grasses in these ecosystems, but this encroachment may proceed more slowly than previously thought, new University of Otago-led research suggests.

Read more at: <http://phys.org/news/2015-08-tree-domination-world-savannas.html#jCp>

World's first ant map launched in Hong Kong

6 August 2015



Dr Benoit Guenard (C), Assistant Professor at the HKU School of Biological Sciences, and his team members display ant species at the Hong Kong University (HKU) on August 6, 2015

The world's first ever ant map showing the distribution of the tiny industrious creatures around the globe was launched Thursday by the University of Hong Kong in a bid to shed more light on the insect world.

Read more at: <http://phys.org/news/2015-08-world-ant-hong-kong.html#jCp>

Buying fertile soils is certainly one of the most safe and remunerating forms of long term financial investment, given that fertile soils are a limited, non-renewable natural resource that will be more and more scarce in the future.

Luca Montanarella