

MADISON'S LUMBER REPORTER

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News & Updates

Canada Sawmill Production : Dec 2013

Lumber production by Canadian sawmills decreased 14.8 per cent from November, to 4,151.3 thousand cubic metres in December, according to Statistics Canada Friday. Compared with December 2012, lumber production increased 5.8 per cent.

Sawmills shipped 3,912.2 thousand cubic metres of lumber in December, down 14.7 per cent from November.

Elsewhere, total Canadian wood product 2012 to 2013 sales were up 18.7 per cent, to \$24.2 billion, said StatsCan's "Manufacturing at a Glance: The year 2013 in review", released Tuesday.

US House Prices, Indexes

Demand Institute, a nonprofit think tank operated by The Conference Board and Nielsen released a report, "A Tale of 2000 Cities", Wednesday which found that, of the 50 largest US metropolitan areas where housing prices are expected to appreciate between 2012 and 2018, the top five will see rises on average of 32 per cent, while the bottom five will average gains of only 11 per cent.

The report is based on an 18-month research program that included an analysis of 2,200 cities and towns in the United States and interviews with 10,000 consumers.

The study predicted that the national median price for an existing single-family home will rise at a much slower rate in the coming years than in 2013, when prices advanced 11.5 per cent. The study sees prices growing at an annual rate of 2.1 per cent between 2015 and 2018, as supply and demand begin to even out.

The double-digit price increases of the past two years are not indicative of future trends since they were largely driven by investors snapping up distressed homes to meet surging rental demand, the study said.

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Russian Timber Exports to Japan : 2013

The arrival of Russian logs and lumber products to Japan in 2013 was calculated, according to Japan Lumber Journal Friday.

The arrival of logs was 228,053 cubic metres, down by 16.4 per cent from the previous year. The arrival of spruce and fir was about the same as the previous year. However, the arrival of pine and larch was down by almost 25 per cent, showing that the decline in the demand still continued in the market. The arrival of larch last year stood at the 10,000 cubic meter level due to the severe conditions in producing areas.

The total arrival of Russian lumber products was 886,219 cubic meters, down 6.5 per cent from the previous year.

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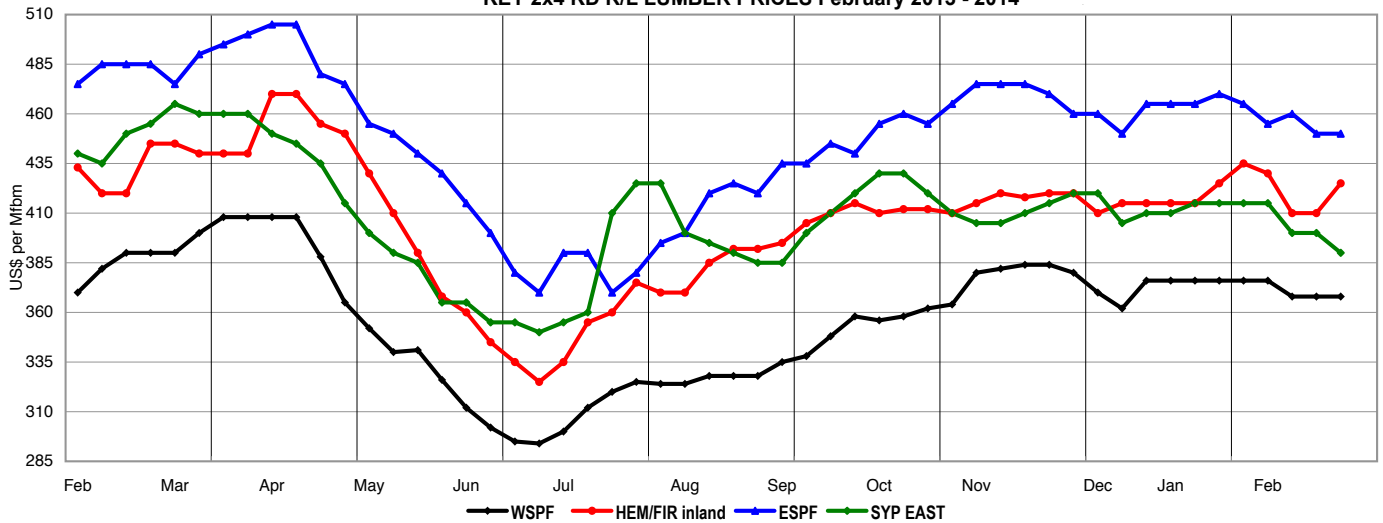
Canada's Forest Inventory

On February 11, 2013 NASA launched the Landsat 8 Earth-observing satellite, and 100 days later transferred operational control to the US Geological Survey.

Landsat 8 is beaming 400 photos back to Earth per day, having reached its final altitude of 438 miles (705 kilometres) in April.

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KEY 2x4 KD R/L LUMBER PRICES February 2013 - 2014



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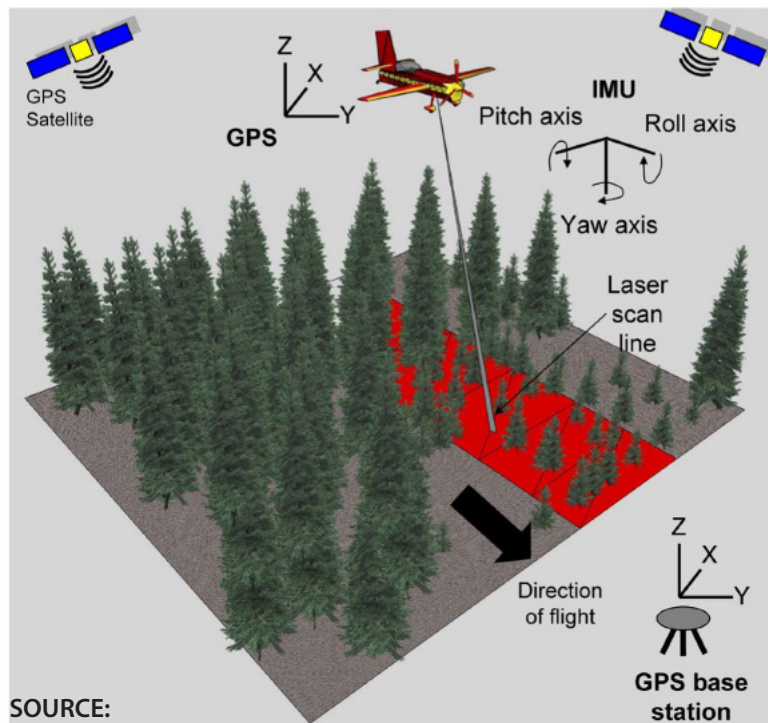
Enhanced Landsat 8 data have quickly found their way into a wide range of operational applications, including forest health monitoring by the US Forest Service, burn severity mapping by the USGS, NASA and the National Park Service, and cropland mapping by the National Agricultural Statistical Service.

Australian researchers are finding that improved Landsat 8 data have enhanced their ability identify and quantify areas of land degradation or improvement in the extensive Australian outback.

In Canada, generated from Landsat satellite data, the Earth Observation for Sustainable Development of Forests (EOSD) forest cover map consists of 610 segments, or tiles, each representing an area of about 15,000 square kilometres. The tiles detail 21 land cover classes as they existed in about 2000.

The EOSD team used all of the Landsat images that intersect with Canada's forested ecozones, which cover about 60 per cent of the country. About 80 per cent of the country was mapped, and all land cover types found in those images were classified, including forest cover.

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SOURCE:
Canadian Forest Service, Canadian Wood Fibre Centre
Schematic of an ALS system.

17th Annual Global CEO Survey

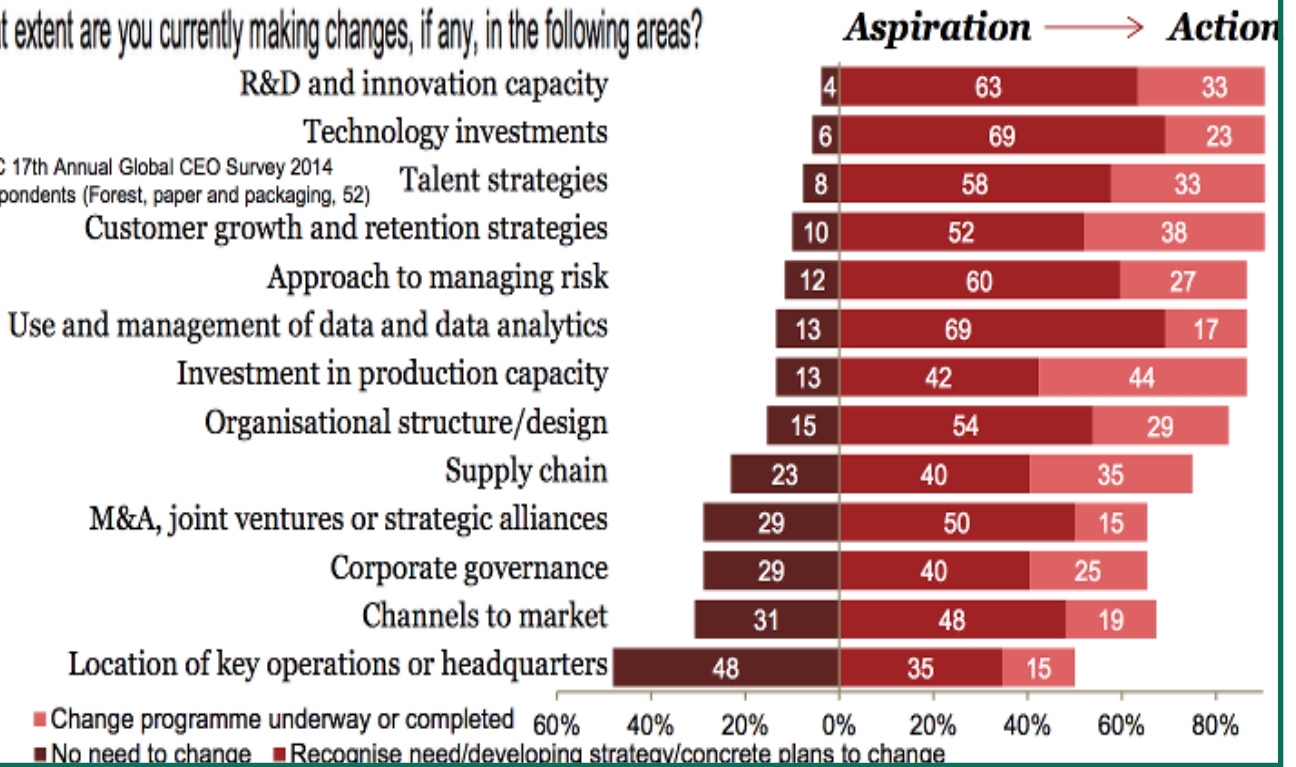
Four-fifths of forest, paper & packaging industry CEOs identified technological advances such as the digital economy, social media, mobile devices, and big data as key trends transforming their business. Nearly two-thirds looked to resource scarcity.

FPP CEOs are more concerned than their peers about a wide range of threats to their business.

Eighty-seven per cent told us they see a need to make changes to their approach to managing risk. Just 27% have begun, though. And most sector CEOs are only partially confident in their team's readiness to cope. Just 23% rate risk management as well-prepared. That's significantly less than the overall sample at 40%.

Q: To what extent are you currently making changes, if any, in the following areas?

Source: PwC 17th Annual Global CEO Survey 2014
Base: All respondents (Forest, paper and packaging, 52)



Key Prices

	This Week	Last Week	Change	Month Ago	Change	Year Ago	Change
WSPF KD R/L 2x4	368	368	0	376	-8	390	-22
WSPF KD R/L 2x6	354	354	0	358	-4	386	-32
WSPF KD R/L 2x8	338	340	-2	346	-8	374	-36
WSPF KD R/L 2x10	400	406	-6	410	-10	400	0
WSPF KD PET 2x4 Stud	350	350	0	340	+10	375	-25
WSPF KD PET 2x6 Stud	305	305	0	305	0	375	-70
Douglas Fir Green R/L 2x4	400	390	+10	405	-5	380	+20
Douglas Fir Green R/L 2x10	452	445	+7	495	-43	390	+62
ESPF KD 2x4 8ft Stud	400	400	0	395	+5	420	-20
OSB Ontario 7/16" (CDN\$)	220	230	-10	235	-15	440	-220
CSPLYwood Toronto 3/8" (CDN\$)	386	398	-12	398	-12	423	-37

Weekly News

Home Prices, US

CONT'D FROM PG 2 Elsewhere, Standard & Poor's/Case-Shiller index rose 13.4 per cent in December from a year ago, according to new data released Tuesday.

Although down from a peak of 13.7 per cent in November, this is the fastest calendar year gain since 2005 as a result of relatively low mortgage rates and low inventories in the first few months of 2013.

House prices dropped about 35 per cent from their peak after the housing bust and have now risen around 20 per cent since hitting their trough in early 2012.

Meanwhile, Freddie Mac on Thursday posted a record annual profit of US\$48.7 billion for 2013, but it warned its recent string of eye-popping earnings was unsustainable.

The company reported net income of US\$8.6 billion in the three months ended December 31, paving the way for a US\$10.4 billion dividend payment to the US Treasury.

For its part, last week, Fannie Mae reported record annual earnings and said it would ship US\$7.2 billion to the Treasury, putting taxpayers ahead on its bailout for the first time.

After both make their latest dividend payments, taxpayers will have received US\$202.9 billion for their support, US\$15.4 billion more than the US\$187.5 billion provided in bailout funds.

Russian Wood Imports, Prices, Japan

CONT'D FROM PG 2 The arrival of pine and fir lumber from Russia

to Japan was 863,219 cubic metres in 2013, a 5.6 per cent drop over one year ago, according to Japan Lumber Journal. Pine and fir lumber imports did not reach the level in 2005 and 2006, at 1 million cubic metres, but remained strong throughout the year.

Prices of Lumber Products

The price of larch lumber was 30,971 yen per cubic metre. The price of pine and fir was 43,262 yen per cubic metre, up by 29.7 per cent from the previous year and up by 1.3 per cent from the previous month.

17th Annual Global CEO Survey

Sector Snapshot: Forest, Paper & Packaging

FPP sector CEOs have been less confident about short term growth for several years; this year that's especially true when it comes to prospects for the industry, said the PwC Global CEO Survey, released Thursday. Only about half, 54 per cent, expect to see growth, compared to 68 per cent of CEOs overall. And this year they're less optimistic about their own prospects looking farther forward too.

That's probably due to sector worries about a wide range of risks; 85 per cent are concerned about continued slow or negative growth in developed economies compared to 70 per cent of CEOs overall. Far more also worry about exchange rate volatility, high or volatile energy costs, and high or volatile raw material prices. And with overcapacity already an issue in some markets, it's not surprising that 60 per cent of forest, paper & packaging CEOs are concerned about new market entrants.

USW - West Fraser Deal Ratified

United Steelworkers members employed at five West Fraser operations in the BC northern interior have ratified a five-year deal, the union announced Friday. Members at Fraser Lake Sawmill, Houston Forest Products, 100 Mile House Lumber, Quesnel Plywood, and Williams Lake Plywood have each voted in favour of the deal and when combined provided an overall approval of 64 per cent.

Apprentices welcome the deal where living out allowances for all Apprentices will be doubled to \$40 a day/\$280 a week, mileage to be doubled to 50¢ a kilometer to attend school, and those Apprentices attending school outside their community for more than 6 weeks will qualify for a second round trip

Calendar

March 2014

Western Wood Products Assoc. Annual Meeting
March 3-9 – Portland, OR
<http://www.wwpa.org>

IWPA's World of Wood Convention
March 5-7 – St. Petersburg, FL
<http://www.iwpawood.org>

April 2014

Council of Forest Industries Annual Convention
April 4-5 – Prince George, BC
<http://www.cofi.org>

Canada's Forest Multi-Source Vegetation Inventory

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At 25-metre resolution, the tiles represent the highest spatial resolution satellite-derived map data available for the total area of Canada covered.

The images taken by Landsat 8 are 19.5 per cent more accurate than those taken by any previous Landsat satellite and that difference can be very important to some applications. The monitoring of land degradation, forest health, and forest fire sensitivity and burn severity in Canada and the US have all been improved.

The 610 tiles can be downloaded from the Internet for a wide range of uses. The downloaded tiles can be pieced together without losing data integrity or information. Researchers can then use that information in their own landscape and land cover studies—either as is or as source information to generate their own value-added products.

In November, Joanne White and Michael Wulder, of the Canadian Forest Service (Pacific Forestry Centre), Natural Resources Canada, had published in the *Canadian Journal of Remote Sensing* their research, “The Landsat observation record of Canada: 1972-2012”.

“We report several spatial and temporal characteristics of the Landsat observation record for Canada (1972-2012), including image availability by year, growing season, sensor, ecozone, and provincial or territorial jurisdiction,” say the authors in the Abstract.

Hyperspectral sensors carried by satellites can document up to 490 different wavelengths of sunlight reflecting off the Earth's surface. The sensors generate in-depth, spectrally layered data packages. Together, these stacks of spectral images reveal objects and data that cannot be picked up by multispectral sensors—sensors that record far fewer spectra or combine ranges of visible, near-infrared and infrared wavelengths into far fewer spectral bands.

Hyperspectral imagery has been used to map mineral deposits and geology in Canada's north. Canadian Forest Service (NRCAN-CFS) researchers are now developing ways to use it in forestry.

Each type of ground cover—often each species of ground cover—absorbs and reflects a specific combination of wavelengths. If these are identified,

validated and made available, they could be used to improve forest inventory and health information, as well as increase information about biodiversity, natural disturbances and the effects of climate change in Canada's forests.

For example, NRCAN researchers and their colleagues have used imagery recorded by a satellite orbiting 700 kilometres above the Earth to map five individual tree species growing along British Columbia's coast. The researchers also used similar airborne imagery to map chlorophyll, water content, and nitrogen levels within west coast forest canopies' leaves.

Natural Resources Canada uses the information to estimate forest inventory from many sources. A project now underway in the Northwest Territories (NWT) is applying a novel approach to this challenge of estimating forest inventory attributes. Using a variety of new methods developed by NRCAN-CFS researchers and several partner agencies, information is being collected from multiple data sources, including: field plots; LiDAR (Light Detection and Ranging) units mounted on aircraft and satellites; Landsat Thematic Mapper satellite images; and, existing forest inventory where available.

When Madison's spoke to Wulder for the March 9, 2012, (please see “Vegetative Remote Sensing” Vol 62 No 10) issue of your Madison's Lumber Reporter, the CFS was in the process of collecting and organizing data collected by LiDAR.

This volume of information will help guide Canada's decision makers to new forest policy in view of total value across the landscape.

For the NWT project, these maps were subsequently generated from a spatial modelling and mapping exercise that scaled the LiDAR-estimated inventory attributes with Landsat Thematic Mapper and other biophysical data.

The satellite-derived data were translated into a format referred to as the Satellite Vegetation Inventory (SVI), to resemble a conventional forest inventory dataset. Over an area of interest, the Multi-source Vegetation Inventory (MVI) consists of the Forest Vegetation Inventory (FVI) and the SVI in locations where FVI data does not exist. The MVI data can be easily viewed and manipulated in a Geographic Information System (GIS) by forest technicians and managers.

“In the Northwest Territories, the MVI was completed over a pilot study area and is now being extended to much of the southern Taiga Plains Ecozone, encompassing an area about 200 000 km² in size,” according to the Natu-

ral Resources Canada website, here <https://www.nrcan.gc.ca/forests/remote-sensing/13441>).

“Combining several remote sensing technologies in this way to estimate forest inventory attributes will greatly improve resource assessment and reporting by the NWT's Department of Environment and Natural Resources as well as by CFS.

“The more up-to-date inventory information generated through the MVI method will also be invaluable to the National Forest Carbon Monitoring, Accounting and Reporting System and for use in updating the NWT's part of the National Forest Inventory.”

According to the NWT Environment and Natural Resources website, ground sampling programs always accompany a management level inventory and may also be carried out on reconnaissance or operational inventories. They are conducted to provide additional information not available from aerial photography, most importantly volume. Temporary sample plots are established in the field and the data are used to provide information on a wide range of attributes including trees, ecology, site and soils.

Remote sensing can be used to characterize forest ecosystems across large areas. However, the effectiveness of using remotely sensed data for large-area forest inventories depends on the relationship between the scale of the object of interest and sensor-specific characteristics such as resolution and spatial extent, says the NRCAN website.

Remote sensing systems that acquire images with large spatial extents will generally have a lower resolution, and thereby capture less detail, than images acquired at a higher resolution, which usually depict forest characteristics across smaller spatial extents. For example, trees are smaller than the pixel size of medium spatial resolution remotely sensed data (10 to 30 metres), and this prohibits measurement of specific properties, such as tree locations and crown dimensions. At higher spatial resolutions, however, trees become larger than the image pixel size, allowing for direct measurement of particular properties.

Remote sensing can, for example, create imagery to assess fire fuel hazard potential and pest and disease outbreaks in both native and planted forests. By integrating current and next-generation remote-sensing data with geographical and terrain information, scientists are able to provide solutions that are cost-effective and accurate.