

News for Family Forests

March 2018



WOODLAND

Forest Management Co.
PROFESSIONAL FORESTERS

www.woodlandmgmt.com

The hope of spring is reflected in the regeneration of clearcuts, an optimistic log market, and the start of a new baseball season. Woodland continues to observe very strong log prices, which we anticipate will continue throughout 2018. Now is the ideal time to plan a harvest, before loggers get booked for the year, or lose the ability to fit your job into their busy schedule. In general, we are nearing the end of planting season, except for high elevations that will likely be snow bound through April.

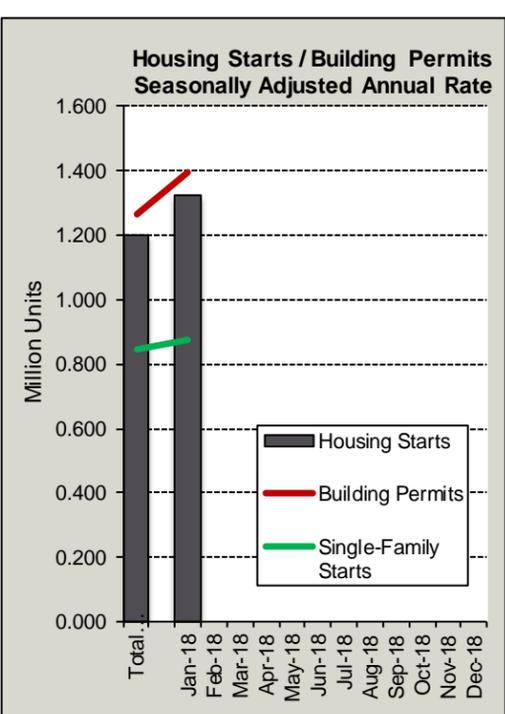
If you need help with any aspect of your reforestation, or want to plan a timber harvest, give me a call at (503) 654-2221 or email me at bkeller@woodlandmgmt.com. In addition to reforestation and timber



harvests, Woodland offers a variety of services – including timber cruising, management plans, pre-commercial thinning, competition control in plantations, forestland valuations, and road maintenance.

- Brent

MARKET WATCH: HOUSING, LUMBER AND LOGS



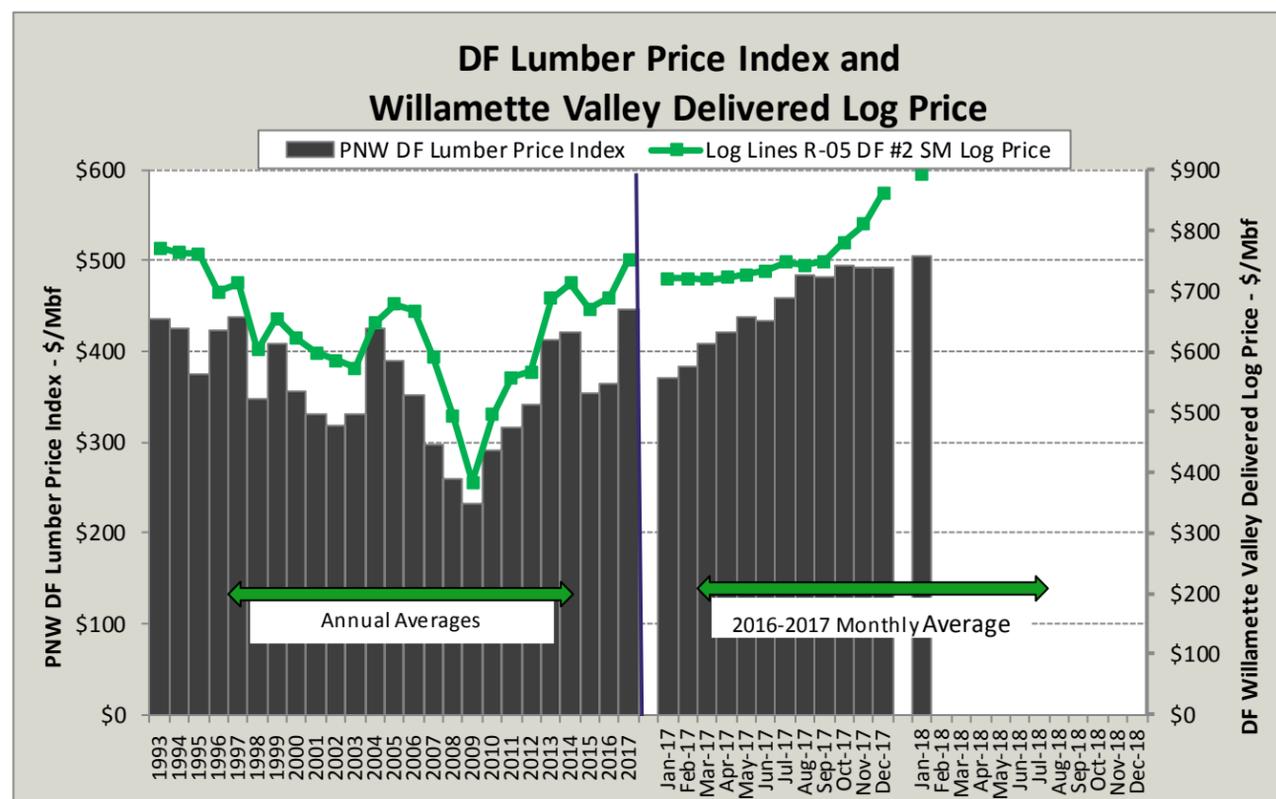
HOUSING STARTS

U.S. housing starts increased 9.7% overall in January. Single-family starts were up 3.7%, while building permits increased 7.4%. While analysts anticipate an improving housing market, they are cautious about the January figures—there is an above average share of multifamily starts, and that market is more volatile. (Wall Street Journal, 2/16/18).

	January 2018	December 2017	Monthly Difference	January 2017	Annual Difference
All Starts	1.326	1.209	9.7%	1.236	7.3%
Single-Family Starts	0.877	0.846	3.7%	0.815	7.6%
Building Permits	1.396	1.300	7.4%	1.300	7.4%
Single-Family Building Permits	0.866	0.881	-1.7%	0.806	7.4%

Source: U.S. Census Bureau

LUMBER & LOGS



DF Lumber and log prices strengthened again in January. Lumber prices increased 2.75% and log prices increased 3.36%. It wasn't long ago that we were happy to see the DF 2Saw average above \$600, now it's near \$900, and many sales are above that. (Note that lumber and log prices are on different scales in the chart.)

- January DF #2S log prices, as reported by Log Lines, increased \$29 to \$892/Mbf, which is 3.4% better than the prior month, 23.9% higher than January 2017, and 27% above the 5-year average.
- At \$506/Mbf, the DF lumber index price for January was up 2.7% above December 2017. It was also 36.6% higher than January 2017 and 27.6% above the 5-year average.

January 2018 Douglas-fir Prices:

	January 2018	December 2017	Change from Previous Month	January 2017	Change from Previous Year	5 Yr Annual Average	Current month compared to 5 Yr Annual Average
Logs	\$ 892	\$ 863	3.4%	\$ 720	23.9%	\$ 702	27.0%
Lumber	\$ 506	\$ 492	2.7%	\$ 370	36.6%	\$ 397	27.6%

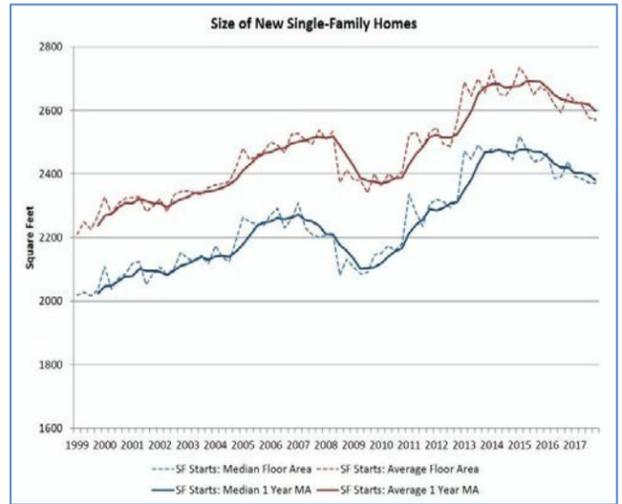
Sources: Log Lines Willamette Valley DF #2S monthly average price & WWPA Pacific NW Coast Douglas-Fir monthly

MARKET NEWS

NEW HOMES ARE GETTING SMALLER

After increasing immediately following the last recession, new single-family home size continued to decline during the final quarter of 2017, as the average size for new single-family homes reached 2,571 square feet.

This illustrates a reversal of the trend that had been in place as builders focused on the higher end of the market during the start of the recovery. As the entry-level market expands, the National Association of Home Builders (NAHB) expects typical new home size to decline further. (NAHB, 2/19/18)



HOUSING EXPERTS CURB ENTHUSIASM

Despite the current strong housing market, 41% of housing experts expect home value appreciation to slow within the next five years due to new changes to U.S. tax laws. The Tax Cuts and Jobs Act, enacted in December 2017, will limit the mortgage interest deduction for homeowners with higher mortgages. However, 31 % of those surveyed had a more optimistic view of the housing market as a result of the tax reform. The remaining 28% of respondents said that tax reform did not change their outlook. (Zillow Press Release, 2/20/18)

SAWMILLS IN U.S. WEST INCREASED PRODUCTION IN 2017

Western U.S. sawmills operated at 81% of practical capacity in 2017 and produced 14.063 Bbf of softwood lumber, a 3% increase over the 2016 production. The production increase was experienced in the coast (+3.1%) and the inland (+3%) mills. (Western Lumber Facts, 2/2/18)

OREGON'S CAP & TRADE: NOT READY FOR PRIME TIME

Oregon lawmakers are considering passing a cap & trade program to limit overall carbon emissions and reward enterprises that reduce their emissions. While there is widespread interest in this type of legislation, there are many details to work out. The Governor supports the concept, and has even created the position for a carbon policy advisor, Senate Majority Leader Ginny Burdick, believes it will not happen in the current legislative session that ends in March. The issue will be picked up again in the fall. (Oregonian, 1/29/18)

CANADIAN SOFTWOOD EXPORTERS ENJOYING CURRENT MARKET

Softwood lumber duties aren't dampening the spirits of Canadian lumber producers, as strong demand from rising U.S. housing starts and tight supply are expected to keep prices high throughout 2018. Prices have been creeping up and averaged \$528/Mbf for Western SPF lumber shipped from Canada in 2017, up from an average of \$278 in 2015 and \$401 in 2016. The price increases have more than offset the tariffs assigned.

Kenneth Shields is the Chairman of B.C. based Conifex Timber Inc. He said that he expects markets will remain robust and that the company's earnings per share more than doubled last year as it posted record revenues that rose 15%. In fact, at these prices, harvest reductions in British Columbia will likely be deferred and production will accelerate. (Canadian Press, 2/19/18)

OREGON JOINS NEIGHBORS: UPLISTS MURRELET

The Oregon Fish and Wildlife Commission voted 4-2 in February to upgrade the status of the marbled murrelet from protected to endangered. California and Washington have passed similar measures in recent months. The Oregon Department of Fish and Wildlife now have until June to complete survival guidelines. Survival guidelines must be quantifiable and measurable. They will prescribe actions intended to ensure the survival of individual members of the species. They will serve as interim murrelet protections until affected state agencies develop and adopt endangered species management plans.

Lands owned, managed, and leased by state agencies will receive new guidelines, but they are expected to have no direct impacts on private landowners. Private lands will not be affected by the uplisting unless the Board of Forestry decides to revise the Forest Practice Act regulations.

Nadia Gardner, an environmental scientist and North Coast resident, will be looking for more than logging restrictions. She believes it is crucial to look at both of the environments where the murrelets spend their time—the forest and the ocean. “We have the current occupied nesting habitat and old growth—which is very little at this point—on public lands and not enough to sustain the population in the long term,” she said. “So the next step has to be protecting potential, future habitat so we can actually build on that habitat and in the long term there will be more, not less.” (Oregonian, 2/9/18) (Oregon Fish & Wildlife, 2/12/18) (Daily Astorian, 2/13/18)

ZINKE ORDERS FUELS REDUCTION

Secretary Ryan Zinke reiterated his earlier message to directors and land managers in the Department of the Interior, calling for “more aggressive practices” to “prevent and combat the spread of catastrophic wildfires through robust fuels reduction and pre-suppression techniques.” This proclamation coincided with support for the President's budget request for a wildland fire management program. Zinke claims the president's budget will provide “the resources needed for fuels management and efforts that will help protect firefighters, the public and local communities.” (Wildfire Today, 2/12/18)

SUPER WOOD!?

Scientists say a simple and inexpensive new process can transform any type of wood into a material stronger than steel, and even some high-tech titanium alloys. Besides taking a star turn in buildings and vehicles, the substance could even be used to make bullet-resistant armor plates.

Densified wood is not a new concept. However, with current methods of manufacture, it tends to weaken and spring back toward its original size and shape, especially in humid conditions.

Scientists believe they have come up with a better way to densify wood. Their simple, two-step process starts with boiling wood in a solution of sodium hydroxide (NaOH) and sodium sulfite (Na2SO3). This partially removes lignin and hemicellulose (natural polymers that help stiffen a plant's cell walls)—but it largely leaves the wood's cellulose (another natural polymer) intact, Hu says.

The second step involves compressing the treated wood until its cell walls collapse, then maintaining that compression as it is gently heated. The pressure and heat encourage the formation of chemical bonds

between large numbers of hydrogen atoms and neighboring atoms in adjacent nanofibers of cellulose, greatly strengthening the material.

The newly compressed wood is three times as dense as the untreated substance and its resistance to being ripped apart is increased more than 10-fold. The densified wood can be molded into almost any shape. Perhaps most importantly, it is also moisture-resistant. (American Scientific, 2/7/18)

ELLIOT UPDATE

Oregon is continuing to move forward with plans to keep the 90,000-acre Elliott State Forest. State Lands Director, Jim Paul, recently addressed the State Lands Board and said he is working to “decouple” the Elliott trust lands from the Common School Fund, and to develop a habitat conservation plan for the lands. The department’s goal is to begin managing the land under that habitat conservation plan by July 2021.

The planned decoupling is a complicated affair. You will recall that these lands were put into trust to support the state’s Common School Fund. The state was constitutionally mandated to use revenue from timber harvests on the Elliott to benefit public schools, but has instead been losing money on managing the forest. This led the state to have the lands appraised and offered for purchase. When the only bidder was a timber company, the Land Board backed-out of the sale and decided to purchase the land by using state bonds. Bonds in the amount of \$100 million are scheduled to be issued February 2019, as a sort of buy-down of the state’s obligation to the Common School Fund. This would be a partial payment for the appraised value of these lands, which was \$220.8 million. A plan for paying the balance has not yet been disclosed. (News-Review, 2/14/18)

THE CHIP MARKET IS BOOMING

A big jump in export chip prices late in 2017 triggered many suppliers to suddenly push for higher domestic numbers. After years of relative calm, the Northwest region experienced tight chip inventories in 4Q2017. In late January 2018, prices for Doug-fir export chips to Japan were set for the first quarter this year at \$175/BDU loaded vessel, up 27% from last year. Some expect prices may climb significantly higher into the first half of 2018, while also threatening pulp mills with fiber slowdown. However, pending slowdowns in paper manufacturing may even-out the supply crunch. Opinions are split on forecasting Northwest price changes in 2Q2018. For now, Sawmills are "trying desperately to run more production," but with logs at record high costs, many mills are slowing or curtailing shifts, leading to reduced chip flow. (RISI, 2/12/18)

FRUSTRATION AND A NEW PROPOSAL FOR WILDFIRE FUNDING

In early February, exasperated members of Congress say they came close to ending the longtime stalemate over legislation aimed at reducing the threat of catastrophic wildfires, but they say last-minute roadblocks kept a tentative deal from being included in the budget bill. Senator Maria Cantwell (D-WA), said that a bipartisan group of senators reached a “strong consensus” on how to proceed, and that it included agreement on the need to “treat the most-at-risk parts of the national forests before they burn up, and do so in a way that is supported by science.” When the language was not included in the final funding bill, she charged that it “appears the inclusion of our bipartisan bill is being blocked from being included.” (OPB, 2/12/18)

The Trump administration proposed flat funding for wildfire suppression for fiscal 2019 at the Forest Service and urged Congress to create the separate wildfire disaster fund. In its spending plan for the fiscal year starting Oct. 1, the administration called for \$2.5 billion for wildfires at the Forest Service. That's slightly more than the administration requested a year ago but nearly matches the amount House lawmakers have proposed for the current fiscal year. The administration said a separate fund would be created to pay for wildfires when the cost exceeds the 10-year rolling average—a number that is poised to begin rising sharply in the next few years, say forest industry sources. (E&E, 2/12/18)

While, President Donald Trump’s budget proposals for this year and next would put an end to fire borrowing by earmarking emergency money for wildfires, it also includes deep cuts in the Forest Service budget overall. The argument over the reform of the wildfire budget will likely continue as budget committees work out the details of the added spending in the current year—and then grapple with President Trump’s budget proposals for fiscal 2019. (Roundup, 2/20/18)

WASHINGTON LOOKS AT LOGGING & LANDSLIDES

Landslides and logging are increasing on Washington’s steep slopes, and the Department of Natural Resources does not have the tools to understand and minimize the situation. This is the claim of Hillary Franz, Washington’s Commissioner of Public Lands. Franz has called upon the state legislature to pass legislation to fund a pre-application review to identify and prevent logging on unstable slopes. The proposed legislation would also provide funding for engineers to analyze logging roads to ensure they are built safely and do not destabilize hills. The amount of Franz’s request for these improvements is \$490,000 for the next fiscal year. This issue gained a higher profile after the 2012 Oso slide. [Oregon has no similar legislation at this time.] (Seattle Times, 1/22/18 & WA DNR Press Release, 1/1/18)

POTLATCHDELTIC CORP: NOW A REALITY

Potlatch Corp. has completed its merger with a smaller rival, Deltic Timber Corp., in an all-stock deal that creates a company with 2 million acres of private timber holdings. The new corporation will employ about 1,500 people, produce about 1.2 Bbf of lumber annually, and will be among the leading U.S. lumber manufacturers. The manufacturing operations include six lumber mills, a plywood plant and a fiberboard plant. (Spokesman-Review, 2/20/18)

HOW BIG IS TOO BIG FOR WOODEN SKYSCRAPERS?

With the recent popularity of building tall with wood, Sumitomo Forestry has unveiled plans for what may be the world’s tallest timber skyscraper, currently referred to as W350. It will be located in the heart of Tokyo, and will not only be the tallest timber tower in the world, but also the tallest building in Japan. It is planned to be 1,148-foot-tall and constructed with a 9:1 ratio of wood to steel.

W350 is estimated to need over 6.5 million cubic feet of wood and cost approximately 600 billion yen. While the building framework will be made of a hybrid timber-steel structure, the interior will feature exposed wood in an attempt to bring people closer to nature. (Inhabitat, 2/16/18)

U.S. FORESTS ARE STABLE

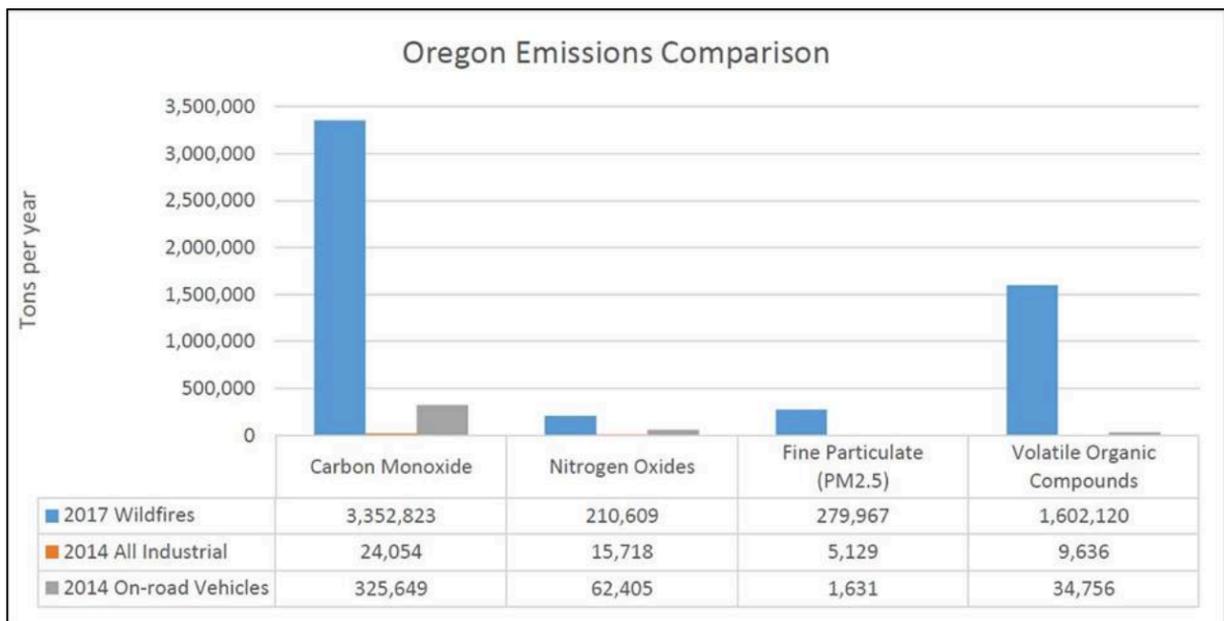
At the national level, U.S. forest cover has remained steady over the last 50 years. This knowledge will help U.S. citizens to know that their forests are well-managed. On an international front, our trading partners will appreciate that our wood products are sustainably produced. Not only has the forest cover been stable, but the amount of wood within the forests have grown by 20% since 1990. These trends are especially pronounced in the southeast. (USDA, 1/30/18)

CENTRAL OREGON NOW HIRING

The Oregon wood-products industry may not be what it used to be, but it is experiencing a slight rebound. Data from the Oregon Employment Department show the wood products industry may be poised to hire as many as 2,900 people over the next six years to replace retiring workers and fill new positions in Central Oregon. Brian Rooney, a regional labor economist with the Employment Department, says the wood-product manufacturing sector is still a large industry in Oregon when it comes to jobs and revenue. The industry, which includes manufacturers of particle board, plywood and two-by-fours, represents \$1.1 billion in total payroll across Oregon. (AP, 2/26/18)

OREGON WILDFIRES POSED THREAT TO PUBLIC HEALTH

The Oregon Department of Environmental Quality estimates that in 2017, nearly 3.3 million tons of carbon monoxide was emitted into the atmosphere. The graph below compares this amount to the estimates of carbon released from Oregon's industrial and automotive sources in 2014. [Data from 2015 to 2017 was likely not available.] Carbon monoxide is not only a greenhouse gas, it poses a hazard to public health. (Healthy Forests, 2/15/18)



CALIFORNIA NEEDS IMPROVED FOREST HEALTH

A bi-partisan and independent commission (The Little Hoover Commission) has released the results of a study of the state's forest health. As has been widely reported elsewhere, the commission found high numbers of trees killed by insect damage, mismanagement, and drought. They also found devastated scenic landscapes. Over the course of the year-long study, an additional 20 million trees died. The commission recommends expanded funding for fire personnel to increase forest management. They also recommend improved teamwork between the state and federal agencies, and a public education program to teach the importance of healthy forests. (Press Release, 2/7/18)

TIMBERLAND APPRAISALS TAKE A DOWNTURN IN THE SOUTH

In an informal survey, three appraisers reported Southern pine values came down in 2017, which was the first time since 2009 amidst the financial crisis. Another appraiser noted a reduction of only 1-3%. A third saw lower numbers "across the board." All those surveyed said stumpage accounted for the losses while dirt values held level or increased slightly. Among TIMO contacts, the results were more varied. One leading group said "almost all" recent appraisals came down, adding that such was "long overdue." Another top-five TIMO noted not all dipped, it was rather a mixed bag, both up and down.

Some industry professionals hope that as recent lower appraisals become a trend, it will help to clear the backlog of timberland that has not sold. (RISI, 2/14/18)

However, RISI also reports that ten "good-sized" sales completed since early December. The nationwide packages (all negotiated and including at least four no-sales of prior bid sales) totaled just under \$800 million and more than 600,000 acres. We list some of them here:

- Hancock's western Washington tree farm sale, known as Pinchot, was split between ORM and Hampton. Estimates put the price well above \$4,000/acre, or perhaps \$140 million.
- Roseburg's sale of 170,000 acres in northern California, now carbon-encumbered, closed to New Forests for something around \$1,350/acre, or perhaps \$230 million.
- Conservation Forestry closed a 125,000-acre sale in Maine to a private investor (part of the Subway family) for \$78 million, or \$625/acre.
- IKEA acquired just under 25,000 plantation acres in south Alabama from Rayonier for \$53.3 million or \$2,167/acre.
- ORM purchased 22,000 acres in southern Oregon from a private sawmill for just under \$2,000/acre.
- Hampton acquired 7,100 acres from Hancock located in western Washington for \$36.9 million, or \$5,200/acre

ANCIENT INSECTS AND BIOFUEL

Firebrats are members of a primitive group of insects; they appeared on land during the Devonian Period, some 420 million years ago. Their unusual digestive system contains enzymes that allow them to thrive on crystalline cellulose, the natural fiber, abundant in straw, paper, and cardboard. Scientists suggest that it is possible that these enzymes could be adopted in industrial processes to break down cellulose into fermentable sugars for biofuel production. An article published in Nature Communications warns that interfering with the firebrats digestive function is lethal to the insects could lead to exploitation for industrial processes. (University of York Press Release, 2/23/18)