Study shows thinning can benefit trees

A new study by forestry researchers at Oregon State University (OSU) has found that old-growth ponderosa pine, even trees more than 250 years old, can increase their growth, improve their health and respond quickly to thinning that provides the trees with more water.

The research, just published in the professional journal Plant, Cell and Environment, may have important implications for the management of old old-growth pine forests in the western United States, scientists said.

Millions of acres of these forests are in very poor condition, suffering from a century of fire suppression that has led to vastly overcrowded conditions, inadequate water and nutrients, poor tree growth, catastrophic fire and huge epidemics of insects that prey on the weakened trees.

The new study, which used a technical analysis of carbon isotopes to gauge tree water stress and photosynthesis before and after thinning, showed that even trees which are hundreds of years old can increase their growth and presumably their ability to resist insect attack if they are given a chance.

"Some people believe that old-growth ponderosa pine forests are decadent, that they can't really respond to the aggressive thinning that would restore conditions similar to those we had before fire was excluded from these forests," said Stephen Fitzgerald, an OSU Extension silviculture specialist and expert on the types of pine forests that dominate much of the drier portions of the American West.

"We found that simply isn't true," Fitzgerald said. "This research demonstrates we can restore the health and growth of these forests, even with trees that are hundreds of years old. Most likely, we will need to use a combination of mechanical thinning and controlled fire or other techniques that are appropriate to the site."

Such approaches have gained some interest and use in areas near the urban-wildland interface in parts of the West, the researchers said, but very little use to date in vast areas of interior old-growth forests that are hugely crowded and in very poor health.

This sets the stage for uncharacteristically intense stand-replacement fires or insect attack, particularly by mountain pine beetles, that will eventually kill the weakened old-growth stands, Fitzgerald said.

Historically, fire moved through many dry forest regions of the West as often as every 10-15 years, the OSU scientists said. In areas suitable for ponderosa pine, this "thinning by fire" resulted in a park-like setting of 12-35 huge ponderosa pine trees per acre, with very little underbrush or other trees.

Trees 300-500 years old thrived, with some trees living up to 800 years.

These healthy ecosystems supported a broad range of other plant and wildlife species that were associated with these park-like old-growth conditions.

ODF annual report notes 2002 timber harvests at highest volume in years

Oregon's timber harvests last year reached the highest volume since 1997, according to a report issued by the Oregon Dept. of Forestry.

The "2002 Annual Timber Harvest Report" shows that the state's harvest during 2002 rose to 3.91 billion board feet (bbf), a 14 percent rise from the record low of 3.44 bbf harvested during 2001.

The increase was not uniform across all forestland ownerships, said Gary Lettman, a forest economist.

"Harvest levels on the 56 percent of Oregon's forests managed by the U.S. Forest Service and Bureau of Land Management remained at extremely low levels," he said, "accounting for only 5 percent of the state's timber harvest volume."

A 15 percent rise in harvest on Western Oregon's forest industry land boosted overall timber harvest there by 14 percent from 2001 to 2002. Eastern Oregon harvests increased by 11 percent.

The harvest increase of 340 million board feet (mbf) on Western Oregon forest industry land accounted for 72 percent of Oregon's total harvest increase last year. Statewide, volume rose to nearly 3 bbf in 2002, its highest level since 1989.

Clear-cutting on the state's national forests continued to decline, with a total of 80 acres clear-cut during 2003 on the 12.8 million acres of forestland managed by the forest service.

Lane and Douglas counties maintained their respective number one and two rankings for timber harvest. Lane produced 470 mbf and Douglas 442 mbf. Klamath County accounted for 207 mbf, the largest harvest among Eastern Oregon counties.

All Western Oregon counties -- excluding Benton, Columbia, Multnomah, Polk and Washington -- removed a larger volume of timber in 2002 than during the previous year.

Softwood, predominately Douglas fir, comprised 96 percent of Oregon's timber harvest, while red alder in Western Oregon continued to account for most of the hardwood species harvested in the state.

Vending-machine toys pose serious health hazards, says DHS and public health officials

A Deschutes County child was recently hospitalized with lead poisoning after swallowing a small medallion necklace purchased from a toy-vending machine, according to Dept. of Human Services (DHS) and Deschutes County Health Dept. public health officials.

The child's lead level was more than 10 times the level of concern for children, and laboratory tests showed the necklace contained 39 percent lead, said DHS epidemiologist Michael Heumann.

Such medallions pose several risks, he added.

Children can not only potentially swallow one of the medallions, which presents both a lead and physical hazard, but they can also be exposed to lead by handling the medallion and then putting their hands in their mouths.

The medallion of concern is round, almost an inch in diameter, grey in color, with a symbol on one side.

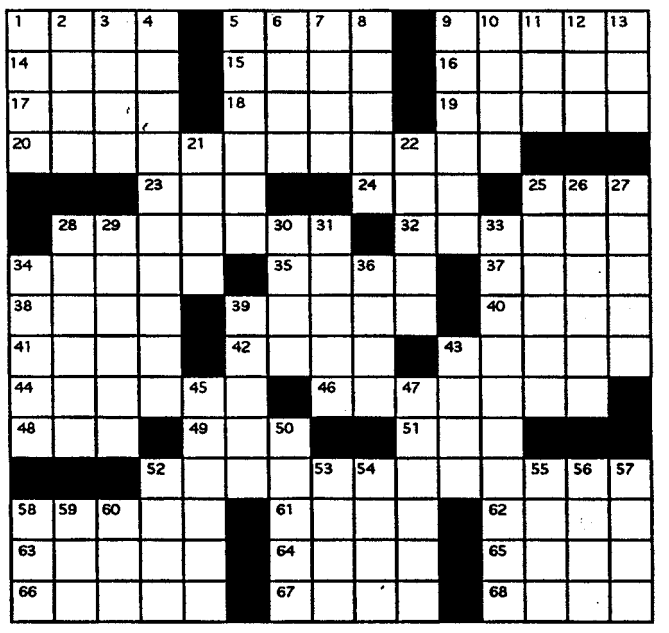
The necklace comes plastic containers from vending machines that offer a mixed toy selection.

Photos of the medallion are available online at www.healthoregon.org/lead/alerts.cfm.

Crossword Puzzle

ACROSS
1 Cargo
5 French cleric
9 O. Henry, to Porter
14 Name for 2 of Henry VIII's wives
15 Explosion
16 Shape metal
17 Sweet treat
18 Part
19 One in last place
20 Costumed child's words
23 Aunt Juanita or Aunt Lupe
24 Orange-colored edible
25 Downed
28 Molar
32 College class
34 One lacking freedom
35 Low
37 Dryer
38 Type size
39 Chest material
40 Bet
41 Underground passage
42 Mars' counterpart
43 Viper
44 Feel bitter about
46 Ballroom dances: var.
48 Suffix for cold or calm
49 Poetic contraction
51 Nothing
52 Was an indicator of
58 Performed
61 Piece of concrete
62 Concern
63 Edible mushroom
64 Cash register drawer
65 Oven
66 Slyly derisive
67 Pintail duck
68 Editor's notation

DOWN
1 Survive
2 __ about; approximately
3 The King __
4 Make inoperable
5 Overseas
6 Inconsiderate one
7 Leave quickly
8 __ board
9 On fire
10 Pillage
11 Not-too-popular U.S. agcy.
12 Generation
13 To be: Sp.
21 Cows
22 Avid
25 Blake of Gunsmoke
26 Uses one of the senses
27 Penetrate
28 Moves smoothly
29 Bigot
30 Word with who or when
31 Horseman
33 Motorists' obstruction
34 Extra
36 Whip
39 __ to; serve
43 Hemmed in by
45 Head: collo
47 Incompeter
50 Catches some Zs
52 Nourish
53 Svelte
54 Vigorous
55 Cool one's heels
56 Perry Mason's creator
57 Car blemish
58 Mornings, for short
59 Felon
60 Numerical prefix



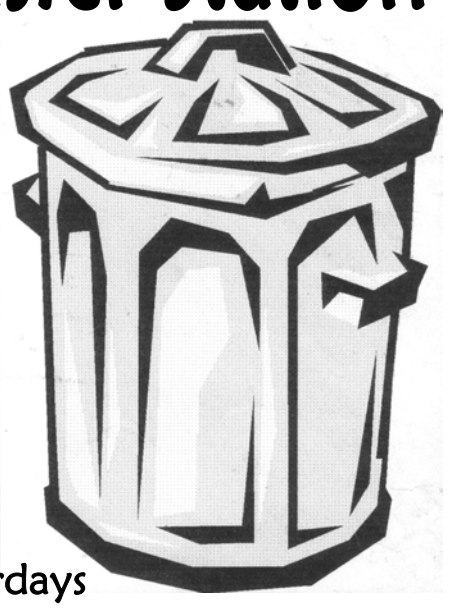
2003 Puzzle Features Syndicate Dist. by DBR Media, Inc.

Crossword Puzzle provided by
Oregon Caves
One of the last old fashioned service stations left
Highways 199 & 46
Cave Junction
Jeff Stiles, Dealer
Chevron
592-3080
NOW OPEN
SUN. - THURS.
6 A.M. - 9 P.M.
FRI. AND SAT.
6 A.M. - 11 P.M.

KBCC - LP
107.9 FM

CLOUSER Drilling
Locally owned and operated in the Valley for over 25 years.
Water Wells
Pump Sales
Installation
Service
592-6777
1470 Caves Highway
Licensed • Bonded • Insured
WWC #1504 • CCB #152266 • CPI #7-113
Member Oregon Ground Water Assoc.

The Kerby Transfer Station
is open
Saturdays:
9:30 a.m.
to
2:30 p.m.



Hours: Mondays - Saturdays
9:30 a.m. to 2:30 p.m.
For more information phone (800) 922-1025
Southern Oregon Sanitation

Illinois Valley Safe House Alliance
Invitation to learn to start your business or help IVSHA start theirs.
Join our Dream Team!
September 4, 2003
4:00-6:00 PM
535 E. River Street
Cave Junction
Southern Oregon Women's Access to Credit

SUNDAY MORNING/AFTERNOON — AUGUST 31, 2003

	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30
2 WTBS	(4:30) Movie:	Movie: ★★★ "As Good as It Gets" (1997, Comedy-Drama) Jack Nicholson. A mean-spirited New York author finds love with a waitress.						Police Chases 5	Police Chases 6	MLB Baseball: Atlanta Braves at Pittsburgh Pirates. PNC Park. (Live)						Police Chases	World's Scariest Police Chases 3		Movie: ★½ "Blue Streak" (1999) (PA) A thief poses as a cop to retrieve a hidden diamond.				Movie: ★½ "Nothing to Lose" (1997)	
3 FOXFAM	Paid Program	Amazing Facts	Medabots	Beyblade	Power Rangers	Power Rangers	Beyblade	Medabots	X-Men	Incredible Hulk	Power Rangers	Galidor: Defenders	Two of a Kind	Raising Dad	Growing Pains	Growing Pains	Movie: "Kissing a Fool" (1998) A womanizing bachelor proposes a test for his fiancee.		Perfect Match: New York		Perfect Match: New York			
4 FOX	Fox News Sunday (In Stereo)		Paid Program	Guthy-Renker	Paid Program	Paid Program	Stargate SG-1 Daniel exposed to radiation.		Outer Limits "Patient Zero" (In Stereo)		Blind Date (In Stereo)	Blind Date (In Stereo)	Fall Guy		State Police	Raceline	Paid Program	Paid Program	Equal Justice		In Fox Box	Futurama	Simpsons	King of the Hill
5 KOBI	This Old House	Home Again	Today David Von Drehle, liquid diets.		Meet the Press		Croc Files	Ctdwn-Green	NASCAR Racing: Winston Cup Series -- Southern 500. Darlington, S.C. (In Stereo Live)								AVP Volleyball: Chicago Open.		Albertson's Golf		Adventure Inc. Island village.		That '70s Show	NBC News
6 ESPN	SportsCenter (Live)		Sports Reporters	Outside the Lines	SportsCenter (Live)			Baseball Tonight	NHRA Drag Racing: U.S. Nationals. Indianapolis. (Live)				College Football: Central Florida at Virginia Tech. (Live)						SportsCenter (Live)		Baseball Tonight (Live)		MLB Baseball: Giants at Diamondbacks	
7 KSYS	Barney & Friends	Jay Jay the Jet	Angelina Ballerina	Anne of Green	Dragon-flyTV	Redwall	Hot Dog Program (In Stereo)		Mariachi: The Spirit of Mexico International Mariachi Festival in Guadalajara. (In Stereo)				Nova		History Detectives		American Experience "Hoover Dam"		Nature "Extraordinary Birds" (In Stereo)		Small Business	Louis Rukeyser	European Journal	Steves Europe
8 TBN	Jentezen Franklin	Dr. David Jeremiah	Kenneth Hagin Jr.	Winning Walk	Coral Ridge Hour		Love Worth Finding		Bishop Blake	It Is Written	Rod Parsley	Paula White	King Is Coming	Bishop P.	Cornerstone		Bayless Conley	Gregory Dickow	Bishop T.D. Jakes	Life in the Word	McClen-don	Jack Hayford	Lakewood Church	Taking Authority
9 LIFE	Paid Program	Paid Program	Paid Program	Paid Program	Hour of Power		Paid Program	Paid Program	Nanny	Movie: ★★★ "Mermaids" (1990, Comedy) Cher. A teen deals with her first love and an unconventional mom.					Movie: "In Cold Blood" (1996, Drama) Anthony Edwards, Sam Neill, Eric Roberts. Based on Truman Capote's book about the Clutter murders.									Movie: ★★★ "Murder Ordained" (1987)	
10 KTVL	CBS News Sunday Morning (In Stereo)		Face the Nation		U.S. Open Tennis: Men's Third Round and Women's Fourth Round. Flushing Meadows, N.Y. (Live)														Happy Days	Outdoors-man	Dora the Explorer	Blue's Clues	Access Hollywood (N)	
11 NICK	Tiny Toon Adv.	Tiny Toon Adv.	Splash TV (In Stereo)	CatDog	Rugrats	Rugrats First bike.	Sponge-Bob	Sponge-Bob	Oddpar-ents	Jimmy Neutron	Rocket Power	Rocket Power	Hey Arnold!	Hey Arnold!	Thornber-rys	Thornber-rys	CatDog	Real Monsters	Angry Beavers	Rocko's Life	Rocket Power	Rocket Power	Jimmy Neutron	Oddpar-ents
13 KDRV	Rebecca's Garden	Paid Program	Coral Ridge Hour		Believer's Voice	Impe Presents	Animal Advent.		Track and Field: IAAF World Championships. Paris.						PGA Golf: Deutsche Bank Championship -- Third Round. Norton, Mass. (Live)				NFL Preseason Special		Hot Ticket (In Stereo)	Paid Program	To Be Announced	
15 USA	Martin	Living Single	Paid Program	Paid Program	Paid Program	Paid Program	PGA Tour Sunday		Peacemakers "No Excuse"		Walker, Texas Ranger		Movie: ★★½ "Fried Green Tomatoes" (1991, Comedy-Drama) Kathy Bates. Fannie Flagg's tale of friendship between Alabama women.				JAG "Answered Prayers" (In Stereo)		U.S. Open Tennis: Third and Fourth Rounds. Flushing Meadows, N.Y. (Live)			
17 A&E	Paid Program	Paid Program	Treasure! "Hawaii's Lost Riches"		Breakfast With the Arts Widespread Panic; Dianne Reeves; McCoy Tyner.				Movie: ★★ "The Mayor of Casterbridge" (2001, Drama) Ciaran Hinds, James Purefoy. A mayor's family returns 18 years after he sold them.						Behind Closed Doors	Take This Job... Mortician.			Incurable Collector	House Beautiful	Seasond Travlr	All Year Round	Sell This House	Makeover Mamas
18 HBO	(4:30) Movie:	Movie: ★★★★ "Who Framed Roger Rabbit" (1988) Bob Hoskins. 'PG'			Movie: ★★ "Like Mike" (2002) Magic sneakers propel an orphan to a slot in the NBA. 'PG'				Real Sports		Movie: ★★ "Man of the House" (1995, Comedy) Chevy Chase. 'PG'		Movie: ★½ "American Outlaws" (2001, Western) Colin Farrell. (In Stereo) 'PG-13'				Movie: ★½ "The Glass House" (2001) Leelee Sobieski. 'PG-13'		Movie: ★★ "Like Mike" (2002) Magic sneakers propel an orphan to a slot in the NBA. 'PG'			
19 SHOW2	(5:45) Movie: ★★ "The Favor" (1994, Comedy) Harley Jane Kozak.				Movie: ★½ "Crossroads" (2002, Comedy-Drama) Britney Spears.		SmallrmDance		Movie: ★★½ "Focus" (2001) A man faces discrimination by people who think he's Jewish.				Movie: ★★★ "The Sum of All Fears" (2002, Suspense) Ben Affleck. (In Stereo)			Movie: "Sour Grapes" (1998) Two cousins feud over the division of a gambling jackpot.			Movie: ★★½ "Quigley Down Under" (1990, Western) Tom Selleck, Alan Rickman.			"Cross-roads"
21 SHOW	(5:00) Movie: "Captain Corelli's Mandolin"		Movie News		Movie: ★★½ "Orange County" (2002, Comedy) Colin Hanks.		Movie: "On Golden Pond" (1981) Old tensions resurface during a family's lakeside vacation.				Movie: ★★★ "12 Angry Men" (1997, Drama) A lone juror holds out for justice in a murder trial.				Movie: "Ghost World" (2001) A caustic teen's soulmate is a middle-aged record collector.				Movie: ★★★ "Flatliners" (1990) Med-school students make trips past the threshold of death.		Movie: ★ "Soul Survivors" (2001)	
22 MAX	(4:45) Movie:	Fatal Kiss (In Stereo)	Movie: ★★ "The Confession" (1999) A lawyer faces an ethical dilemma over his client's plea.				Movie: ★★★ "Spider-Man" (2002) A bite from a mutant spider gives a teen unusual powers.				Movie: ★★★ "Blind Date" (1987, Comedy) Bruce Willis. 'PG-13'				Movie: ★★★ "School Ties" (1992) A young Jew endures anti-Semitism at a 1950s prep school.				Movie: ★★★½ "Speed" (1994) A transit bus is wired to explode if it drops below 50 mph. 'R'		Movie: ★★½ "Booty Call" (1997, Comedy) Jamie Foxx. 'R'	
29 ESPCL	NFL Yearbook	NFL Yearbook	1991 Redskins	Buffalo Bills	1994 Chargers	1997 Chiefs	NFL Yearbook	1984 Dolphins	NFL Yearbook	1998 Broncos	1995 Colts	1996 Packers	1989 Browns	1990 Giants	1979 Steelers	1998 Falcons	1998 New York Jets	1994 49ers	NFL Yearbook	NFL Yearbook	NFL Yearbook	NFL Yearbook	Movie: ★★★ "The Natural" (1984, Drama)	
30 TRAV	American Icons "Hoover Dam"		Exotic Islands	Vacation Home	Great Hotels	Great Hotels	Naomi Judd's Nashville		Royal London		Thrill Rides Las Vegas Style		Cooling Off in Vegas		Daytona Motorcycle Madness		Sports Fan's Road Trip		World's Best Natural wonders and wildlife.		American Icons "Hoover Dam"		Las Vegas: Cheaters Beware!	
34 AMC	(5:35) Movie: ★★½ "Road to Bali" (1952, Comedy) Bing Crosby.		Movie: ★★★½ "The Nutty Professor" (1963) Jerry Lewis. An absent-minded chemist becomes an irresistible charmer.						Movie: ★★★ "Foul Play" (1978) An innocent woman is drawn into a plot to kill the pope. 'PG'				Movie: ★★★ "Family Business" (1989) Sean Connery. Three generations of thieves collaborate on a daring heist. 'R'				Movie: ★★★★ "American Graffiti" (1973) Richard Dreyfuss. Teenagers in 1962 California ponder their futures. 'PG'				Movie: ★★★ "Saturday Night Fever" (1977)	
35 TNT	Movie: ★★½ "Wolf" (1994, Horror) Jack Nicholson. A wolf bite gives an editor a horrific new lease on life.					Movie: ★★ "Fallen" (1997, Suspense) Denzel Washington. A cop believes that a dead murderer's evil spirit lives on.			Movie: ★★★ "In the Line of Fire" (1993) Clint Eastwood. A veteran Secret Service agent battles a vicious assassin.						Movie: ★★½ "Legends of the Fall" (1994, Drama) Brad Pitt. The forces of love and war slowly destroy a Montana family.				Movie: ★★½ "The Edge" (1997) A plane crash strands two rivals in the Alaskan wilderness.	
38 DISN	Bear in House	Book of Pooh	Wiggles	Out of the Box	PB&J Otter	Wiggles "Hygiene"	Rolie Polie Olie	Rolie Polie Olie	Stanley	House of Mouse	Movie: ★★ "The Land Before Time II: The Great Valley Adventure" (1994, Adventure)		Proud Family	Kim Possible	That's So Raven	Lizzie McGuire	Boy Meets World	Sister, Sister	Even Stevens	Even Stevens	Boy Meets World	Sister, Sister		
39 SCIFI	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Movie: ★½ "Rebirth of Mothra" (1996) The giant moth battles a three-headed threat to Earth.				Movie: "Rebirth of Mothra II" (1997) The giant moth squares off against an evil sea creature.				Movie: "Rebirth of Mothra III" (1998) Mothra goes back in time to battle a powerful monster.				Movie: ★½ "Godzilla vs. Megaguirus" (2000) Misato Tanaka. Godzilla battles a giant insect.				"Godzilla, Mothra, King Ghidorah"	
45 DISC	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Gut Busters An eating contest.		Gut Busters in Alaska Eaters compete.		High Speed Impacts		Hot Pursuit		Most Dangerous Car Chases		Monster Garage "American Monsters"		Monster Garage		Monster Garage "Hot Dog Car"		Supervolcanoes	
46 ANPL	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals	Funniest Animals
47 COM	Paid Program	Paid Program	Beat the Geeks	Sports Night	Primetime Glick	Movie: ★★ "Weird Science" (1985, Comedy) Anthony Michael Hall, Kelly LeBrock.			Movie: ★★½ "Real Genius" (1985, Comedy) Val Kilmer. Science students go after their idea-stealing professor.				Movie: "Back to School" (1986) Campus life is turned upside down by an obnoxious tycoon.				Movie: ★★½ "National Lampoon's Vacation" (1983, Comedy) Chevy Chase.				Movie: ★★½ "Revenge of the Nerds" (1984)	
48 CRT	Share Cam	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	Paid Program	NYPD Blue "The Bank Dick" (In Stereo)		Movie: "Perfect Family" (1992) A single mother takes in two boarders hiding a deadly secret.			