



Chelan Fire and Rescue brings in Volunteer Coordinator Asher

BY ERIN ROSSELL, STAFF WRITER

CHELAN – Chelan Fire and Rescue 7, Entiat Fire District 8 and Orondo Fire District 4 was approved for a second safer grant in 2017. The new, 4-year safer grant would provide the funds for the cost of 20 new sets of bunker gear for new recruits each year, but also the salary for a volunteer recruitment coordinator. During December's regular commissioner's meeting, it was announced that the position was offered to Brandon Asher, who, at the time, was serving as Fire Captain with Arlington Fire Department, which included responsibilities in volunteer services and recruitment. He comes to Chelan and Douglas Counties with his Associates Degree, Bachelor's Degree in Fire Management and Fire Protection Technology Degree.

Son of Chief Mike Asher with Entiat Fire/Chelan County Fire District 8 (CCFD 8), Brandon started as firefighter in 1993, after his graduation from Entiat High School. Moving on to Wenatchee Valley Community College, he received his EMT training and certification in 1995, then went on to a residency program within Shelton Fire and Spokane Fire, before setting in with the City of Moses Lake, officially starting his firefighting career. In 2003, Asher lateraled to Arlington, where he would be promoted to Fire Captain in 2009, and was part of the county Technical Rescue Team and Hazmat Team for his nearly 15 years



Brandon Asher

there.

"I've responded to some pretty major calls," Asher explained on experience brought, which include responding to the 2014 Oso Slide as on-duty captain, and the Marysville School shooting just a few months later, "there's no way to describe it (the feelings in those moments)," he stated. Asher also brings an abundant knowledge of the area and has worked with wildland a lot over the years, he explained. "I put the whole wildland program together in Arlington," he stated, "they didn't have anybody certified to fight wildland fires, so I wrote a grant, pulled a brush truck and got it certified, and the first fire they went to was the Chelan Complex fire," he expressed, "I had just gotten everybody trained ... (but) that's really what got that program off the ground."

"I've always kind of kept

SEE ASHER ON PAGE A2

Smart meter concerns explained, voices continue to grow

An interview with the Smart Meter Awareness Group of Chelan County

BY ERIN ROSSELL, STAFF WRITER

CHELAN – From the moment Chelan County PUD presented a proposal on the replacement of the current, older analog meters with the advanced two-way meters, there was been voiced concern on the adverse health effects that these meters may present within the community. The Lake Chelan Mirror sat down with three of those voices for a detailed look at the concern.

Chelan citizens Robin Casal, Suzan Keller and Laura Folsom, with Smart Meter Awareness Group of Chelan County, presented a folder, filled with some research from reputable sources and other pieces the group felt solidified the health concerns associated with the increase in Radio Frequencies (RF) that the installation of the two-way meters would present. "When we started doing our research," began Laura Folsom, "is the health effects on the human body, and they (Chelan County PUD) have taken a study that was done back in 1998, which was actually done on an older study, that was done by the military on a healthy, young adult male that determined that such amount of RF was safe for the human body." That study is the study that has been used on their basis for the safeness of



Photo by Erin Rossell

Members of the Smart Meter Awareness Group (left to right) Laura Folsom, Suzan Keller and Robin Casal.

the RF, she continued. "Most of us weren't in this type of frequency back in 1998," Folsom added, "we didn't hardly have cell phones and things like that ... they say this one machine is safe, but don't really say (how safe it is) when you add them all (the electronics) together."

The RF levels of the advanced meters have been placed as a Class 2B with the International Agency for Research on Cancer, the group explained, stating that it is a potential carcinogenic. This classification of potential carcinogens has also been placed by the World Health Organization (WHO) in 2011, which happens to be the location of the study from the 1998 RF safeness as well.

"Consider the accumulation (of RF) that we got going," supplied Suzan Keller, "when you're exposed to 24/7 emissions, they build up, and our immune systems work to keep us healthy, and they do a good job until they start to get compromised ... what's they're not considering is the continual bombardment on our immune systems, especially if you have children or an already compromised immune system ... we feel that that study (in 1998) has nothing to do with today's world." Robin Casal stated that the input was provided that the advanced meter is safer than cell phones, "what I'd like to ask the community," started Casal, "are they willing to give up their cell phones to

have a smart meter? Because it is the accumulation, like sugar. We can have some sugar but over time it builds up and after a while you're going to develop that diabetes if you're having those 10 cokes a day ... we're asking not to be guinea pigs."

The other concern, the group stated, are with the placement of the "hubs" that will be placed every quarter mile and constantly receiving the information from the advanced smart meters. Fire hazards are yet another concern, as one group member, who currently has a one-way meter in place, reported that the one-way meter surged through ap-

SEE SMART METERS ON PAGE A2

2018 Chelan High School Hall of Fame inductees

BY ERIN ROSSELL, STAFF WRITER

CHELAN – Nearly every seat was taken at the Chelan High School's (CHS) gymnasium, Thursday, Feb. 1. The ceremony for the 2018 Chelan High School Hall of Fame inductions of Jim Talley, Phil Cullen, Stephanie Parsley and the 1999 State Baseball Championship Team was held between varsity games at Chelan High School, and the photos and histories of the inductees will be displayed at the Chelan Community Gym.

Jim Talley, a 1951 graduate of CHS played quarterback for the undefeated 1951 football team. He was also a 3-year starter on the basketball team, which finished fifth in 1949, third in 1950 and won the state title in 1951. Talley was also a pitcher on the Goat's baseball team, winning 49 games while losing only seven in his years played. He moved on after being accepted to Eastern Washington University on a basketball scholarship, then went to serve his country with the U.S. Air Force. Talley began his coaching career in Shelton in 1958, returning to Chelan in 1961, where he taught P.E. and coached from 1961 to 1987, when he retired. No state tournaments for football during those times, but, Coach Talley's team won 69 games, 5 Caribou Trail League Championships and finished undefeated twice, including a 1967 team ranked in the top 10 nationally. "The inspiration and guidance of Coach Talley, while on and off the field of competition, have strengthened our community, for which we will always remain grateful."

Phil Cullen, a 1998 CHS graduate, was outstanding in basketball, baseball and academics. He remained instrumental in helping the Chelan Goats basketball win the 1998 State Basketball Championship. After graduation, Cullen played basketball and baseball for the Utah Utes. The right-handed pitcher was

SEE HALL OF FAME ON PAGE A2



Photo by Erin Rossell

The ceremony for the 2018 Chelan High School Hall of Fame took place on Feb. 1. Inductees were Jim Talley, Phil Cullen, Stephanie Parsley and the 1999 State Baseball Championship Team. See more photos on page A5.

NCW MARKET.COM
CLASSIFIED ADS

ECHO RECORD MIRROR HERALD BUSINESS JOURNAL

CLASSIFIEDS

INSIDE THIS WEEK

Community.....	A1-3	Classified Index	
Church News.....	6	Classifieds, Puzzles	A7-8
Obituaries/Death Notices	6	Public Notices	A8
Bulletin Board	6	Church Directory	A6
Letters/Community Voices	6	Health Care Directory	A4
Sports	4-5	Business & Services Directory	A2



310 E. Johnson Ave.,
P.O. Box 249
Chelan, WA 98816-0249
509-682-2213
www.lakechelanmirror.com



© NCW Media Inc. 2018
Chelan, WA 98816-0249

Phone: (509) 682-2213
Fax (509) 682-4209

Office Hours
Mon. to Fri. 9:00 a.m.-5:00 p.m.

Contact Information

Publisher
Bill Forhan • 548-5286
publisher@leavenworthecho.com

Managing Editor
Gary Bégin
gary@ncwmedia.net

Reporter/Photographer
Erin Russell
lcmreditor@gmail.com

Reporter/Photographer
Michael Maltis
qchreporter@gmail.com

Advertising Sales Director
carol@leavenworthecho.com
Carol Forhan • 548-5286
echoads@leavenworthecho.com

Advertising Sales Chelan
RuthEdna Keys • 682-2213
ruthk@lakechelanmirror.com
Lindsay Timmermans • 860-7301
adexec1@ncwmedia.net

Production Coordinator & Creative Services
RuthEdna Keys
prepress@lakechelanmirror.com
509-682-2213

Office Manager

Classifieds/Legals
Kristie McClanahan
mirrorads@lakechelanmirror.com

Circulation
Kristie McClanahan • 509-293-6780
circulation@lakechelanmirror.com

Delivery Gary Hopkins

Bookkeeper 509-548-5286

Lake Chelan Mirror (USPS 101-620)
is published every Wednesday
by NCW Media, Inc.
310 E. Johnson Ave., Chelan, WA
Telephone: (509) 682-2213.
Fax: (509) 682-4209
Periodical postage paid at
Chelan, Wash. 98816

Postmaster: Send address corrections
to: Lake Chelan Mirror, P.O. Box 249
Chelan, WA 98816-0249

Classifieds/Legals

Classified/Legals ads can be placed
during normal office hours by
calling 682-2213,
email:
mirrorads@lakechelanmirror.com

Weekly rates:
\$12.00 for the first 30 words
50 cents each additional 5 words
(over 30 words)

Borders, bold words, headlines,
logos, photos subject to
additional charges.

Services

Back Issues are available up to
one year after publication for a
small fee.

Photo Reprints are available for
most photos taken by staff. Ask
about photos we may have not
had room to print.

Deadlines

Letters to the Editor: Noon, Friday
Calendar Listings: Noon, Friday
News Submissions: Noon, Friday
Display Advertising: Noon, Friday
Legals: Noon, Friday
Classified Ads: Noon, Friday

Subscriptions

Chelan/Douglas Counties (yearly) \$35.50
In State (yearly) \$38.50
Out of State (yearly) \$49.50
Student In/Out of State \$28/\$38
Military (yearly) \$35.50

The Lake Chelan Mirror does not
refund subscription payments
except to the extent that it might
fail to meet its obligation to publish
each week, in which case the
cost of the issues missed would
be refunded as an extension.
Subscriptions may be transferred to
another individual or organization.

Letters policy

The Lake Chelan Mirror welcomes
letters to the editor. All letters must
be accompanied by the author's
name, a home address and a day-
time phone number (for verification
purposes only). Letters may be ed-
ited for length, clarity, accuracy and
fairness. No letter will be published
without the author's name. Thank
you letters will only be printed
from non-profit organizations and
events. We will not publish lists of
businesses, or lists of individual
names. Email your letters to:
lcmreditor@gmail.com

Corrections

The Lake Chelan Mirror regrets any
errors. If you see an error, please
call 682-2213. We will publish a
correction in the next issue.

News Tips

Have an idea for a story?
Call the Mirror at 682-2213

On The Internet

Web site:
www.lakechelanmirror.com

News e-mail:
lcmreditor@gmail.com

Advertising e-mail:
ruthk@lakechelanmirror.com

WNPA Washington
Newspaper
Publishers
Association
Member

NCW Media Inc. prints
on recycled newsprint with
soy ink. Please Recycle

NCW MEDIA
Bringing the community to your door

SMART METERS

CONTINUED FROM PAGE A1

pliances and fried them. "No one is responsible," explained Keller, "the insurance companies have started to put caveats on policies saying that they will not be responsible for any damage from these (smart meters) ... when you come down to the insurance company won't cover it, the PUD won't cover

ASHER

CONTINUED FROM PAGE A1

my eye on paid positions over here," Asher explained on his transition, "I didn't want to be a firefighter, (so) it was going to be more of a career step." Unaware that the three regions had applied for the grant together, when it opened up and he was approached on the position, he was a bit surprised, he said, adding his thoughts in that moment, "the opportunity came, and I did have goals to get back over here."

There's a budget that Asher has received as part of the safer grant from the government. "So, what I've been doing right now is just making the foundation of the promotional material," he began, explaining the promotional banners, fliers and brochures he has placed throughout the valley, "and it's for all three agencies ... the grant is for 20 people a year, for three years in a row, and that's for all three agencies as well."

HALL OF FAME

CONTINUED FROM PAGE A1

then drafted by the Seattle Mariners, playing for three years in the Mariner's minor league organization. Cullen has received his Bachelor's Degree in Civil and Environmental Engineering, as well as a Master's Degree in Leadership, and is currently

it, the manufacturer of the device won't cover it ... guess who (will have to)."

Opting out options are unclear at this time, explained the group. "You will have to pay more," said Keller, "they say because they will have to send a meter reader to your house, but their punishing anyone, basically, that doesn't go along with the program." The group stated that they would rather see an

Asher has high hopes for the success of the program. "The ultimate goal is to try and get our 20 volunteers a year," he explained, "but hang on to them. Because sometimes you get people that go through and get the training and find out that this is just too hard, or this isn't for them ... (so) the goal is to get them, not only on the fire side, but if they wanted to go to EMT school, (to help them be able to do that). Retention is a big deal, so we'll be looking at different way to keep them motivated and active."

In discussing the next steps and the future of the grant, Asher expressed the importance of this year's Levy request. "It's really important that we pass this Levy coming up," he explained, "because we're going to lose our safer grant firefighters if we don't pass that," there's also various equipment that is in need of replacement, explained Asher. "We've applied for grants for new firetrucks, we've applied for grants for

opt-in process for the smart meters, as opposed to the opt-out. "An opt in means you would have to sign and say 'yes, I would like a smart meter," explained Casal, "and waive liability ... but this would allow people to have them, but hopefully also allow it to educate them."

The Smart Meter Awareness Group of Chelan County began a petition throughout Chelan County, hoping to

stop the implementation of the smart meters. Approximately 300 of the 500 signatures on the petition belong to Chelan residents, explained Casal. "Ninety percent of the people did not know what they were, and that they were being implemented," the group explained, "and when they found out, they were appalled." An online petition is also available at www.change.org, simply search Chelan County PUD, click the link "I'm opposed to smart meters."

stop the implementation of the smart meters. Approximately 300 of the 500 signatures on the petition belong to Chelan residents, explained Casal. "Ninety percent of the people did not know what they were, and that they were being implemented," the group explained, "and when they found out, they were appalled." An online petition is also available at www.change.org, simply search Chelan County PUD, click the link "I'm opposed to smart meters."

port, from 11 a.m.-2 p.m. During the opening house, those interested will have the opportunity to see equipment, meet some of the staff, ask questions and pick up an application. For more information on volunteering, contact Assistant Chief Brandon Asher at 509-682-4476 or email at basher@cf7.org.

tions out of the five really don't have any volunteers right now, he explained. Those two stations being Chelan Falls 72 and Airport 74, "and so we're making a big push to get volunteers out there." Will be holding an open house on Feb. 15 at Station 72 - Chelan Falls, from 5 - 7 p.m., and on the 17th at Station 74 - Air-

port, from 11 a.m.-2 p.m. During the opening house, those interested will have the opportunity to see equipment, meet some of the staff, ask questions and pick up an application. For more information on volunteering, contact Assistant Chief Brandon Asher at 509-682-4476 or email at basher@cf7.org.

Firefighters promoted



Firefighter/EMT Steve Saugen has successfully completed his probationary year with Chelan Fire and Rescue. FF/EMT Steve Saugen has been promoted to Firefighter 3rd Class.



Firefighter/EMT Tye Zacher has successfully completed his probationary year with Chelan Fire and Rescue. FF/EMT Tye Zacher has been promoted to Firefighter 3rd Class.

finishes.

1999 State Baseball - Players included Drew Blake, Eric Campbell, Robert Johnson, BJ Mitchell, Michael Nickel and Manager Brandon Johnson. The team was nicknamed "Bad News Bears," and had extreme heart and endless effort. The Goats had to travel to Lake Roosevelt to advance into playoffs, winning 14-10. The next game was against the number one ranked Brewster Bears,

handed the Bears their first loss of the season 2-0. The 1999 Goats then advanced to state playoffs in Spokane, where they won their semi-final league against Columbia White Salmon 6-4. This win put the Goats in the state championship game against Friday Harbor, which Goats won 7-6, securing the first state championship title in Chelan History, finishing up a 500 record for the season.

Area glaciers topic at Wenatchee Valley Museum February 13

SUBMITTED BY WENATCHEE VALLEY ERRATICS CHAPTER

WENATCHEE - Wenatchee Valley Erratics Chapter of the Ice Age Floods Institute will meet at 7 p.m., Tuesday, Feb. 13 at the Wenatchee Valley Museum, 127 South Mission, Wenatchee.

Glaciers from Icicle Creek advanced multiple times over the past several hundred thousand years and left deposits near Leavenworth. Some thought lakes or slack water from Glacial Lake Missoula outburst floods deposited the boulders lying between Leavenworth and Peshastin. The late local geologist Bill Long collected data about these boulders, and others near Wenatchee, during the 1960s to 1980s. That data tell a different story about Icicle Creek glaciers and the location of past termini.

Kelsay Stanton, WVC adjunct instructor and licensed professional geologist, will talk about work she's done in the Leavenworth area with



Kelsay Stanton, WVC adjunct instructor and licensed professional geologist

USGS geologist Richard Waitt, using information collected by Long, and describe how it fits into the regional glacial and glacial outburst flood story.

The program is free and open to the public.

For overviews of the Ice Age Floods and more information on the Ice Age Floods Institute, please see our website: <http://www.iafi.org>; <http://www.hugefloods.com>; and quadricopter videos of Ice Age features, <http://www.brucebjornstad.com>.



Mountain Meadows residents at the Autumn Leaf Parade

New YEAR. New HOME.
New FRIENDSHIPS.

Create NEW memories at Mountain Meadows Senior Living Campus in 2018!

Stop by today, enjoy a hot cup of coffee or tea, take a tour and experience for yourself why our residents love the friendships they have made at our beautiful community.

Call us today! (509) 293-6796

MOUNTAIN Meadows
Senior Living Campus

Independent Living Cottages • Assisted Living • Memory Care

320 Park Avenue | Leavenworth, WA 98826

www.mountainmeadowsliving.org

Stop in... Take a Community Tour Today!

BUSINESS & SERVICES DIRECTORY

TAXI SERVICE

AC Checker



The Classiest Taxicabs in the Industry
We can get you there • Concerts • Wine Tours • Airport or ??
Fast, Friendly, Reliable Service
Great Rates
509-663-TAXI(8294)

REACH CUSTOMERS

Let us help you get the word out about your Business/Service



Call Today!
Lindsay 860-7301
Ruth 682-2213

Salvation Army Red Kettle campaign tops \$7,600



Photo courtesy of Chelan Valley Hope

The Christmas Season 2017 Salvation Army Red Kettle Campaign topped \$7,600 thanks to the 11 local Chelan and Manson organizations and numerous volunteers who rang the Salvation Army Red Kettle Bells in November and December. Citizens again showed their generous hearts in supporting this campaign. The \$7,500 raised will be distributed through Chelan Valley Hope to help with emergency needs of families and individuals to avoid evictions and PUD shutoffs, as well as emergency gasoline and non-food pantry items. They are thankful to be part of this giving community. Pictured are Chelan High School Bell Ringers Scott Abel and Jacob Bell.

CHELAN HIGH & MIDDLE SCHOOL HONOR ROLL

The following students earned a 4.0 grade-point average:

Seniors: Scott Abel, Elizabeth Chavez, Kayla Farias-Negrete, Lucas Gueller, Sydney Hawkins, Logan Manier, Javier Torres, Meghan White
 Juniors: Colt Corrigan, Devin Davis, Gage Estes, Sierra Rothlisberger
 Sophomores: Amelia Bordner, Caroline Kelly, Melissa Mendoza, Molly Oswald, Mercedes Reynolds, Casey Simpson, Ella Tschetter, Melina Wyckoff
 Freshmen: Drake Bird, Xitlali Cruz, Isabella Gatzemeier, Alejandro Hernandez, Dillon McCardle, Ainsley Peherson, Ella Polley, Cory Schramm, Jesus Vazquez-Rocha

The following students earned a 3.5 to 3.99 grade-point average:

Seniors: Samantha Alencaster, Samantha Bills, Emily Christenson, Ariana Cortez, Caleb Dodge, Matthew Fitzpatrick, Guadalupe Galvan, Alex Gavin, Shaelyn Hadley, Jennifer Howell, Anna Lance, Daniel Lopez Jr., Talia Montana, Alexander Nelson, Marc Nimz, Olivia Nygreen, Ashley Oswald, Javier Pastor, Madeline Peebles, Taylor Sams, Jennifer Tapia, Jose Torres-Olea, Dixie Valdez-Martinez, Getsemany Vazquez, Karen Villanueva, Jonathan Zelaya
 Juniors: Jaxon Ayling, Dylan Bainbridge, Caden Bryant, Katelyn Deal, Wyatt Dietrich, Kasey Emery, Lexie Gleasman, Skyler Gordon, Richard Heimark, Anahi Hernandez-Bucio, Itzhiana Luna-Munoz, Cameron Manda, Gabriella Navarro, Jasmin Negrete-Ortega, Benjamin Nygreen, Owen Oules, Moises Payan, Jennifer Perez, Gavynn Peterson, Valeria Silva, Sydney Simpson, Quinn Stamps, Kassie Strange, Aaliyah Uvalle-Torres, Carlos Venegas, Andrea Villa-Garcia
 Sophomores: Connor Abel, Haylee Fry, Leanna Garfoot, Audrey Gilleland, Julissa Guzman, Kyle Jackson, Christopher Knight, Macaela LaPorte, Alondra Lopez, Jasmine Lopez, Alexander Marron-Andrade, Emma McLaren, Laura Montoya-Benitez, Elijah Morris, Maxwell Nimz, Odalíz Ordaz, Elijah Phelps, Ashlyn Sanderson, Nicolas Toe, Tobin Wier, Talitha Zelaya
 Freshmen: America Avila, Gladiola Banuelos, Parker Brown, Chris Cannasso, Annie Chavez, Charize Clementson, Elynn Collins, Cash Corrigan, Caden Doggett, Lana Fielding, Elaine Folsom, Cynthia Garcia, Caela Gonzalez, Jonathan Gonzalez, Jose Gonzalez, Geovanna Granados, Miles Grossberg, Adelyn Gueller, Noah Hildreth, Hailee Huddleston, Michelle Hyde, Matea Ivory, Josef Keen, Madison Latter, Diana Lopez, Johan Luna-Munoz, Maria Magallon, Skye Malone, Alex Martinez-Salazar, Talyn McCoy, Luis Mendez, Daisy Monje, Lydia Montalvo-Gomez, Miguel Neri-Cazares, Sage Paddock Reid, Aiden Peterson, Kaitlyn Rainville, Philip Silvestri, Aden Slade, Taryn

Sweeney, Lizbeth Tapia, Jose Torres, Alexis Valera, Aliyah Villanenor, Hayley Watson

The following students earned a 3.0 to 3.49 grade-point average:

Seniors: Fatima Chavez, Mario Galvan, Jacqueline Gonzalez, Keilani Hinton, Selina Landeros, Hunter Lehmbecker, Azzia MacDonald, Gage Martin, Bethany Martinez, Bryan Mendoza, Luis Morales-Peréz, Jesus Ramirez, Matthew Smith, Carlos Vargas
 Juniors: Alvaro Arteaga, Sam Austin, Antonio Cazarez-Rubalcaba, Bryson Darlington, James Estrada, Katie Flowers, Emmalee Folsom, Favian Franco, Joshua Gilleland, Mario Gonzalez, Jade Hatherell, Jordi Lopez, Rosa Lopez-Barboza, Omar Marquez, Eleno Mendez, Angel Mendiola, Alberto Mendivil, Alex Neri-Cazares, Cailee Parham, Dawson Roberts, Sierra Shively, Juan Uvalle
 Sophomores: Emilie Barnes, Jacqueline Benegas, Danika Bills, Kaylin Boykin, David Chavez, Isabella Evans, Elisabeth Garcia-Zamudio, Andrea Gavin, Danica Gordon, Seth Hannu, Monroe Kenck, Nicole Manier, Arly Meneses, Ariana Monje, Esmeralda Payan, Eleno Rivera, Cynthia Sanchez, Hank Schindler, Christopher Schmidt, Daniel Servin, Steven Williams, Connor Wilson, Maximus Wilson, Zachary Zavala
 Freshmen: Quinton Baker, Natalie Bishop, Yareli Cabrales, Billie Corter, Ivan Duenas, Sabriena Estes, Gunner Gleasman, Cole Iversen, A.J. Martinez, Hugo Mata, Sonia Montoy, Angelica Nava, Galilea Negrete, Annaliese New, Jonathan Ramirez, Ringo Renteria, Chase Rogge, Dayana Vega-Ramirez

CHELAN MIDDLE SCHOOL The following students earned a 4.0 grade-point average:

Eighth grade: Jamie Bekel, Charles Bordner, Noemi Garcia-Rosas, Amberly Guerrero, Hannah Hawkins, Zion Lovell, Mackenzie Rogge, Teegan Silva, Ruby Wier, Alexis Williams
 Seventh grade: Aedan Baker, George Benson, Angel Cortez, Mackenzie Griggs, Jorge Lopez, Celia Polley, Caelan Rothlisberger, Kira Sandoval, Luke Simmons, Olivia Strandberg
 Sixth grade: Allison Abel, Peyton Bodle, Samuel Bordner, Benjamin Brownfield, Giovanni D'Orazio, Josie Garfoot, Lily Hill, George Neff, Ryan Rainville, Cray Silva

The following students earned a 3.5 to 3.99 grade-point average:

Eighth grade: Gerardo Aguilar-Luna, Giovanna Arellano-Jimenez, Jagjot Dhaliwal, Jordyn Emery, Aliyah Finch, Joseph Gasper, Kya Holmes, Ethan Kehi, Logan Lemings, Itzel Martinez, Quin McLaren, Catherine Mercado, Karen Munguia, Janelly Munoz, Wilson Mutter, Yuleymy

Nunez, David Payan, Rocio Sevilla, Hunter Shumway, Reed Stamps, Ethan Strandberg

Seventh grade: Ryan Allen, Greer Bainbridge, Malie Benson, Melina Cruz-Magallon, Lizbeth Diaz-Casales, Marilyn Gonzalez-Aguilar, Piper Grossberg, Jose Hurtado-Sanchez, Madison Kehl, Gideon Kelling, Elizabeth Knight, Elly Maxham, Austin McCardle, Pablo Mendez, Diana Mendoza Ruelas, Winston Mutter, Kaylee Patino-Castro, Floria Perez-Llamas, Jason Pritchard, Mariana Sanchez-Mendoza, Tate Sandoval, Joslynn Simmons, Jeremias Torres
 Sixth grade: Kayla Alcazar, Diana Andrade, Miriam Andrade-Guzman, Dreama Bahena, Jazmine Banuelos, Anahi Barajas-Oseguera, Madielyn Barker, Juan Benavides, Madison Brummer, Malachi Chavez, Danika Dietrich, Kaden Eygabroad, Ian Garfoot, Makayla Garfoot, Carly Hefley, Hailey Helm, Zachary Hort, Landon Johnson, Deyanira Lopez, Eva Marron-Andrade, Emmeron Miller, Rylee Moody, Charlie Morgan, Kathryn Morris, Mariella Nelson-Munoz, Duke Nordby, Celso Nunez-Cisneros, Elizabeth Nunez-Tejada, Elizabeth Peebles, Estrella Perez-Torres, Maleigha Peterson, Kyle Rynd, Kiana Sinkiewicz, Abigail Smith, Ellie Smith, Olivia Smith, Gavin Studley, William Toe, Alexandra Vazquez-Rocha, Martin Zamora, Jennifer Zhong

The following students earned a 3.0 to 3.49 grade-point average:

Eighth grade: Deisy Avila, Amairany Bravo, Bethzabel Bravo, Edgar Cristobal, Julissa Diaz-Magana, Alexander Galdarisi, Samuel Gilleland, Katelyn Gordon, Morgyn Harrison, Levi Jeffries, Aubrey Jones, Deasel Kenck, Francisco Landeros, Beau Nordby, Cody Sanderson, Neida Vargas, Orlando Villa-Garcia, Cash Walsh
 Seventh grade: Braiden Boyd, Donovan Casal, Rylan Cody, Zuleima Davila-Rubalcaba, Chloe Goforth, Irene Hernandez, Quan Ho, Linzay Jaime-Barrios, Morgan Lautiki, Yajaira Magallon-Galvan, Giselle Martinez-Salazar, Isaac Martinez-Valadez, Ashley Perez-Mendoza, Clayton Reeves, Ryker Savage, Beau Schmidt, Kimberly Torres, Leslie Virrueta-Farfan, Benjamin Williams
 Sixth grade: Juleima Campos, Kalob DeMotts, Spencer Ferris, Arabelle Finch, Oscar Flores-Becerril, Litzzy Gaona-Vargas, Amiee Gordon, Bryce Hampton, Joni Heinz, Aron Hernandez-Bucio, Ronald Hooten, Kiera Hoskin, Natalie Islas, Sawyer Jeffries, Asher Kelling, Omar Magdaleno-Sanchez, Catherine Martinez-Bautista, Jonathan Mendoza, Antonio Padilla-Montalvo, Lysset Patino Hertado, Mia Perez, Yaritza Ramirez, Merica Rivera, Finnegan Smith, Mia Soller, Dominick Solorza, Julian Vargas-Cervantes, Lizbeth Vazquez, Sarmel Vazquez, Kassidy Wilfong, Isaac Wilson, Vianney Zamora Blanco

CMS Students of the month



Photo courtesy of Rob Rainville/Chelan Middle School

Chelan Middle School Student of the Month from December are (not in order): Catherine Mercado nominated by Linehan; Madison Brummer nominated by Gallup; Olivia Strandberg nominated by Harris; Chloe Goforth nominated by Reister; Teegan Silva nominated by Williams; Natalia Vasquez nominated by Nygreen; Yuleymy Nunez nominated by Hart; George Benson nominated by E.Reister; David Payan nominated by Einspah; Mariana Sanchez nominated by Pearl; Ben Ho nominated by Anhalt; Ryan Allen nominated by Sanderson; Carly Hefley nominated by Burton; Saul Lopez nominated by Chambers; Olivia Smith nominated by Plummer; Cash Walsh nominated by Sargent-PE; Oscar Cardenas nominated by Sargent-Health; Francisco Pacheco nominated by Green; Kassidy Wilfong nominated by Burdick and Edgar Christobal nominated by Bertomeu.

COLLEGE HONOR ROLL

Local Residents Named to Dean's List at Gonzaga University

SPOKANE - The following residents of Chelan have earned placement on the Gonzaga University Dean's List for Fall Semester 2017. Students must earn a 3.5 to 3.84 grade-point average to be listed.

Andrew R Beckett, Eli Martin Christenson, Jordyn Lee Eldred, Eli Mathew Jenkins and Bridget Leigh Wyant.

Gonzaga University is a humanistic, private Catholic University providing a Jesuit education to more than 7,500 students. Situated

along the Spokane River near downtown Spokane, Wash., Gonzaga is routinely recognized among the West's best comprehensive regional universities. Gonzaga offers 75 fields of study, 23 master's degrees, four doctoral degrees in one college and six schools.

New operators at Bear Creek Golf Course

SUBMITTED BY LAURIE HILTON, BEAR CREEK GOLF COURSE

WINTHROP - Ash and Linda Court of Winthrop, owners of Bear Creek Golf Course, are excited to announce that the operation of their property has taken over by Mike and Laurie Hilton of Winthrop, as of Jan. 1, 2018 and beyond. The Hiltons will be taking over operation of Bear Creek Golf Course from Terry and Debbie Evans who have operated the course for the last three seasons.



Photo courtesy of Bear Creek Golf Course

The Hilton family, Mike and Laurie Hilton and their three daughters, Willa, Daisy and Adele.

The Hiltons moved their family and their construction business from Seattle to the Methow Valley in February of 2005. They have raised their three daughters in the Methow Valley while running their custom design/build business, Hilton Construction, Inc. They will continue to maintain their construction business but will only take on limited client work.

Mike is originally from Houston, Texas where he received a degree in Landscape Architecture from Texas A & M University. Laurie is from Traverse City, Michigan and has an undergraduate degree in French and Business from Western Michigan University, as well as a Master of International Management degree from Thunderbird School of

Global Management in Glendale, Arizona.

Mike began golfing at a young age in Houston. He has casually maintained his golf game over the years but ramped up his frequency after having introduced his three daughters to the game.

Laurie's prior professional career was in Marketing for Brooks Sports, Bayliner (boat industry) and Sonicare.

The Hiltons plan to make their operation a family affair,

echoing the Court's experience of raising four children while operating the course. Their main focus will be on maintaining and improving the quality of the greens while also increasing the reach of their membership.

The Hiltons are so appreciative of the Courts for both creating and maintaining a golf course in this beautiful area. The Hiltons hope to be able to keep this Methow Valley gem alive and successful for the benefit of this community.

NUMERICA PERFORMING ARTS CENTER PRESENT

COLD WINTER NIGHTS COMEDY SERIES

A STAND UP COMEDY SHOWCASE

MARCH 16 at 8pm

featuring **KERMET APIO**

TICKETS: \$20
VIP Table of 4: \$120
Intended for a Mature Audience

Tickets & Info
www.NumericaPAC.org | 509-663-ARTS
 Stanley Civic Center | 123 N Wenatchee Ave.

NCW's Premier Home Show

home SHOW

experts. ideas. innovations. inspiration

2018

FEBRUARY 9TH | 10TH | 11TH

Thousands of Ideas Under One Roof!

Fri 2-7pm • Sat 10-7pm • Sun 10-4pm -- Adults \$6 - Seniors \$4 - Kids 12 and under FREE

Media Partner

ALPHAMEDIA
 LIVE & LOCAL WEATHER

BNCW Office (509) 293-5840 www.BuildingNCW.org

Presented by **COMPLETE DESIGN, INC.**
 "Construction Design Specialists"

Supporting Sponsors: Builders FirstSource, CASHMERE VALLEY MORTGAGE, Moonlight, DEEP WATER HOME

Associate Sponsors: COMMUNITY FIRST, ALPHAMEDIA, LEXAR, ALPHAMEDIA, ALPHAMEDIA

Goats succumb to double-defeat from Omak Pioneers

As the game against the Pioneers was retro night, players and cheerleaders alike dressed in throwback uniforms, and the cheerleaders performed a mix of throwback themed music during their half-time performance.

Photos by Erin Rossell



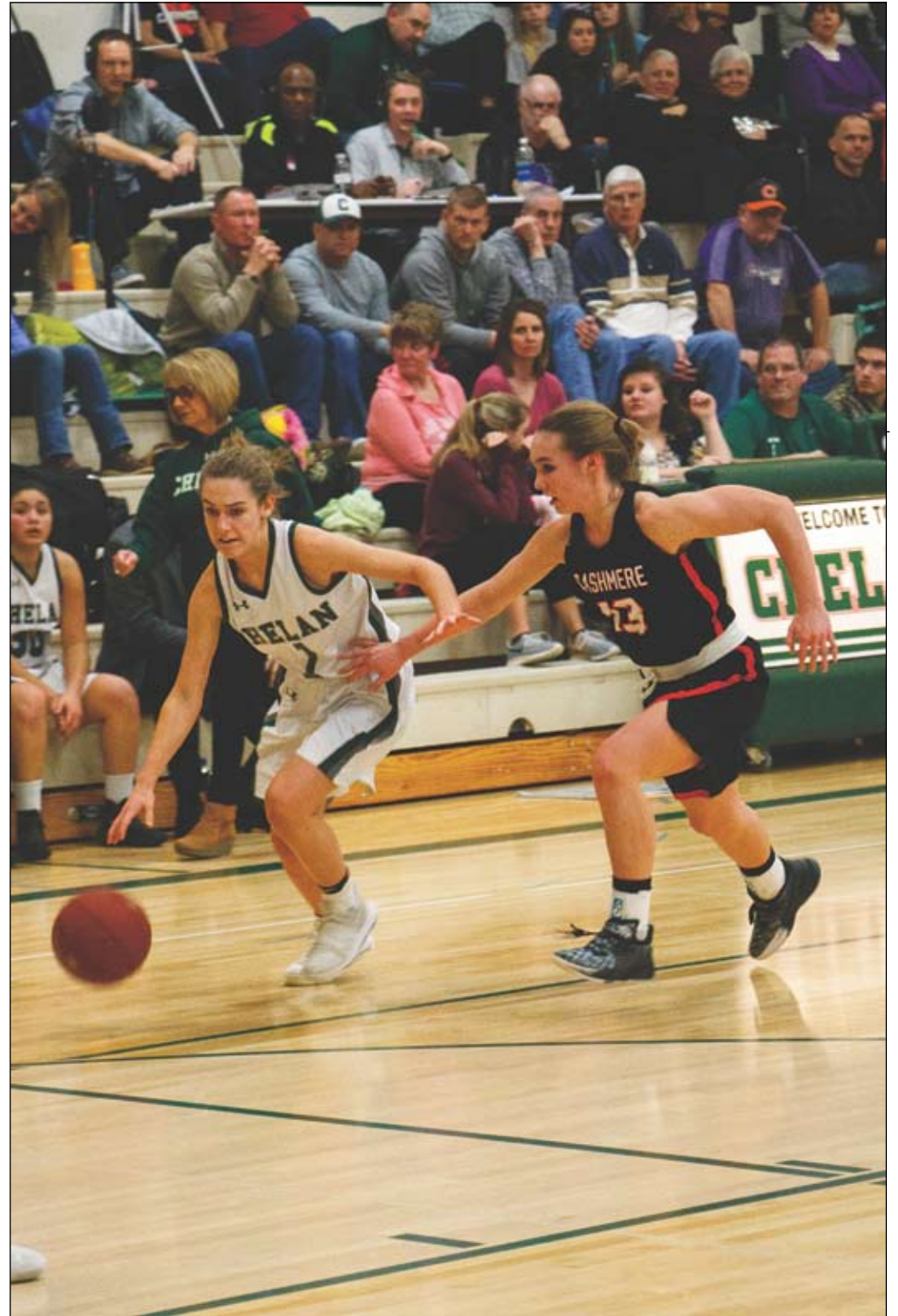
BELOW: Quinn Stamps shoots over Pioneer defenders for a score attempt. The Goats ended the game with a loss to Omak and a final score of 57-73.



BELOW: Katie Rainville goes up for a lay in against the Omak Pioneers, Wednesday, Jan. 30 at the Chelan Community Gym. The Lady Goats barely missed a defeat over the Pioneers with a final score of 52-55.



Bulldogs defeat Goats on home turf



Photos by Erin Rossell

Matea Ivory drives past a Lady Bulldog, toward the basket. Cashmere defeated the Lady Goats with a final score of 14-77.

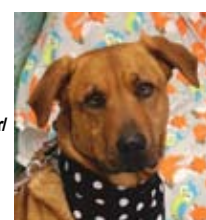


Connor Wilson drives in for a layup against the Cashmere Bulldogs, Thursday, Feb. 1 at Chelan High School. The Bulldogs defeated the Goats with a final score of 41-56.

Got News to share?
Email it to lcmeditor@gmail.com

Pet of the Week

Winston
Age: 2 years
Sex: Neutered Male
Breed: Labrador Retriever/Shepherd Mix
Animal ID: 37664711
Adoption Fee: \$150



Wenatchee Valley Humane Society

509.662.9577
1474 S. Wenatchee Ave.
www.wenatcheehumane.org

Advertise Here & Sponsor the Pet of the Week
Call Ruth, 682-2213

Chelan Middle School 7th grade girls



Photo courtesy of Mike Haerling

The Chelan Middle School 7th grade girls basketball team is 6-0 so far this season. Team members are: front row, left to right: Kenia Sanchez Blanco, Juliana Perez, Olivia Strandberg, Kira Sandoval, Irene Flores, and Yajaisa Megallon Galvan. Back row, left to right: Coach Mike Haerling, Jenny Flores, Joslynn Simmons, Leslie Zirraeta, Kaylee Patino, Isabela Monje and Chris Griffiths.

Trojans stomp out Oroville Hornets



Photos by Erin Rossell

ABOVE: Avery Thompson drives upward to the hoop, Thursday, Feb. 1 at Manson, against Oroville. The Trojans defeated the Hornets with a final score of 62-39.

BELOW: Evelyn De Jesus squeezes in a shot amongst Hornet defenders. The Lady Trojans defeated the Lady Hornets with a final score of 29-19.



2018 Chelan Hall of Fame Inductees



Photos by Erin Rossell

Jim Talley, second from right, was inducted and recognized for all he has attributed to the community and in his time as both an athlete and a coach with the Goats.



Stephanie Parsley, center, was recognized for her outstanding skill in golf, both as a Goat and through WSU.



Phil Cullen, second from left, was recognized for his accomplishments athletically and academically with the Goats.

BELOW: The 1999 Goats baseball team were recognized for their outstanding achievements and securing the first ever State Championship.



HEALTH CARE DIRECTORY

INSURANCE

Protect those you love with ...

Financial Security

- Offering .. • Life Insurance
- Long-Term Care • Annuities
- Disability Income Protection
- Health Insurance
- Medicare Supplements, Advantage & RX plans



Give Kelly Allen a call

509-888-9038

www.kellyalleninsurance.com



Promote your HEALTH CARE SPECIALITY or PRACTICE in the HEALTH CARE DIRECTORY

Call us today!
Ruth 682-2213
Lindsay 509-860-7301

BULLETIN BOARD - EVENTS / MEETINGS

CHURCH SPECIAL EVENTS
St. Andrew's Episcopal Church

Feb. 13

Shrove Tuesday: Pancake Day

CHELAN - Tuesday, Feb. 13, is Shrove Tuesday. As we end this season of Epiphany and begin the season of Lent, let's all celebrate with a great pancake dinner. If any men of the church would like to help out in the kitchen, they would appreciate all volunteers. The more help, the more pancakes. Shrove Tuesday is known as a day of repentance before the beginning of Lent. Starting in the Middle Ages, this day became a celebration of feasting. Rumor has it that the reason pancakes became such a popular menu item for this event is because foods such as milk, eggs, and other fats were restricted during Lent, so everybody used them up in their pancakes. That turned out to be a wonderful choice. Please join us this Shrove Tuesday from 5-7 p.m. for a celebration with friends and pancakes at St. Andrew's Episcopal Church on Woodin Avenue.

Feb. 14

Ash Wednesday

CHELAN - The Wednesday after Shrove Tuesday is Ash Wednesday, the day that marks the beginning of Lent. Plan to attend church on Ash Wednesday, Feb. 14, at 1 p.m., as the Rev. Canon Linda Mayer of St. Andrew's Episcopal Church, leads us into Lent. Tradition for this day includes the Priest taking ashes and marking the foreheads of worshippers with the sign of the cross.

Monday-Friday every week

Chelan/Manson Senior Center Events

Coffee Club, Monday-Thursday, -10:30 a.m. Free SAIL Exercise Class: Monday, Wednesday, Friday, 1-2 p.m., any age welcome, sponsored by LCCH. Wii Bowling, Tuesdays, 10 a.m. Pinochle Tuesday, 1 p.m. Bingo Thursday, 1 p.m. Senior Meals, Monday-Thursday, call (509) 888-4440. Home Delivery Meals (509) 470-0522. For information Chelan Senior Center, 682-2712. Manson: Manson Senior Lunch, Friday, Kathy 687-3377.

EVENTS / MEETINGS

Feb. 7

Story time Chelan / Manson Libraries

CHELAN - Story time is every Wednesday at 11 a.m. at the Chelan Public Library located on Emerson Street. Join them for singing, dancing, clapping, music making as well as reading. It's both fun and educational!

MANSON - Every Wednesday at 11 a.m. the Manson Community Library offers a story time for children ages 2 to 5 and their caregivers. Join the group for a half hour of stories, rhymes, songs, finger plays and other activities. For more information call the library at 687-3420.

Feb. 7

North Cascades Sportsman's Club to meet

CHELAN - The next meeting of the North Cascades Sportsman's Club board will be held on Wednesday, Feb. 7. Board meetings are held the first Wednesday of the month at 7 p.m. Meetings take place at the Chelan PUD located at 1034 E. Woodin Ave. in Chelan.

Feb. 7

Celebrate Recovery

CHELAN - Celebrate Recovery will meet Wednesday, Feb. 7, at 6:30 p.m., at the Chelan Valley Hope Building, 417 South Bradley Street, For information: lcvcr1@gmail.com or (509) 860-8108

Feb. 8, 22

Methodist men's group

CHELAN - The Lake Chelan United Methodist Men's group meets the 2nd and 4th Thursdays, at The Vogue, at 7 a.m.. All men who have a belief in Jesus Christ are welcome to attend.

Feb. 8

Help available for veterans

CHELAN - Chelan County Veteran's Service Officer, WorkSource, and SSVF, coffee and organizational information, second Thursday at Apple Cup Cafe in Chelan, 9 a.m. to noon. DD214, VA Disability Claim and more. For questions: Tony Sandoval at (509) 664-6801 or Bob Goedde at 682-2366.

Feb. 8

Bilingual story time

CHELAN - Bilingual story time is the first Thursday of each month at 6:30 p.m. at the Chelan Library. A fun half hour of stories in Spanish and English for families. The Chelan Library is located at the corner of Emerson and

Feb. 9

Community 'Soup' Kitchen

CHELAN - The Lake Chelan United Methodist Church Community 'Soup' Kitchen is open every Friday, noon to 1:30 p.m. The church is located at the corner of Johnson and Emerson.

Baby rhyming time

CHELAN - Baby rhyming time is every Friday at 10 a.m., at the Chelan Public Library on Emerson Street, for ages 0-3 years. Join them for singing, dancing, nursery rhymes, musical instruments, and story telling for babies, waddlers and toddlers.

Feb. 11

Got the Winter Blues?

MANSON - Come join us Sunday afternoons for "Something To Do." Games, activities, snacks, and tunes at the Manson Grange, 157 E. Wapato in Manson; every Sunday, 3-5 p.m. Call or text (509) 393-6405 for more information.

Feb. 13

AI-Anon

CHELAN - AIAnon meetings are weekly at the Lake Chelan United Methodist Church, 206 Emerson Street, Tuesdays, 12-1:15 p.m. For more information call Sherylann, 682-1817.

Feb. 13

Manson Fire District meeting

MANSON - The Chelan County Fire District 5 Commissioners hold their monthly meeting the second Tuesday of the month at 4:30 p.m. at Station 51 located at 250 W. Manson Blvd.

Feb. 13, 28

Cancer Support Groups

CHELAN - The Women's Wellness Group, cancer support group, has two support groups. The second Tuesday of each month for lunch, with lunch provided by the Wenatchee Wellness Place, at the Lake Chelan Community Hospital Board Room, Feb. 13, at 11:45 a.m.; and the fourth Wednesday of each month at LaBrisa, Feb. 28, at 5 p.m. For more information, contact Anne at 682-8718.

Feb. 13

Heritage Heights board meeting

CHELAN - The Heritage Heights Assisted Living monthly board meeting is held the second Tuesday of every month, 5-6 p.m. in the activity room at Heritage Heights. Community members are welcome to attend. For information Heritage Heights at 682-1998.

Feb. 14

Chelan Fire District meeting

CHELAN - The regular meeting for Chelan County Fire District #7 is held the second Wednesday of the month, 4 p.m. at the fire station, at the corner of Wapato and Sanders. www.chelan7.com

Feb. 15

Chamber Business After Hours

CHELAN - Chelan Senior Center will host this month's Lake Chelan Chamber of Commerce Business After Hours on Thursday, Feb. 15, 6-7 p.m. Please join them as they mingle and network with fellow chamber members and learn a little more about the new remodel for Chelan Station Reuners, the Chelan Senior Center's second-hand store in Chelan Falls. Please RSVP to the Chamber t 682-3503.

Feb. 20

Manson Community Council

MANSON - The Manson Community Council will meet Tuesday, Feb. 20, 6 p.m. at the Manson Park Office on Pedoi Street. All are welcome to attend.

Feb. 21

Senior Living Initiative meeting

CHELAN - The first Senior Living Initiative Meeting for 2018 will be Wednesday, Feb. 21, 5-6:30 p.m. in the PUD Conference Room on Woodin Avenue. This is an open invitation to all interested in the future of our Chelan Valley senior residents both In-Home Care and proposed Campus of Care facility.

Russiagate vs Watergate

Watergate is ancient history to most American voters.

Apparently, it has also been forgotten by some of those who lived it. Carl Bernstein was the Washington Post Reporter who was made famous by the "worst political scandal of the 20th century." Now he dismisses the greatest political scandal of the 21st century as ushering the darkest days of America since McCarthy.

Bernstein wasn't condemning the actions of the FBI, Justice Department or the Democrats. No, in fact he called the Nunes memo a "disingenuous partisan document."

Bernstein went on to say, "In the whole Cold War, the Russians were not able to do what Putin has done through Donald Trump to destabilize the U.S. and its Democratic institutions."

Really? If the allegations made through the Nunes memo are true then the damage done to our democracy through the corruption of the FBI and Justice Department did far more to endanger our great Democracy than even Nikita Khrushchev could have envisioned (look him up). And it's not Putin or Trump that did the damage. It is the Democrat Party machine and their weaponization of our American law enforcement and intelligence agencies against any and all political opponents.

Let's review.

Bernstein's Watergate scandal involved illegal activities undertaken by members of President Nixon's administration. Those illegal activities included bugging the offices of political opponents. Nixon and his closest aides also ordered investigations of activist groups and political figures using the FBI, CIA and IRS as political weapons. The scandal resulted in the indictment of 69 people with trials or pleas resulting in 48 being found guilty.

What the Nunes memo claims is that the Clinton campaign with the support of the Obama Administration paid for a dossier about President Trump that was then used to support a "legal" effort to wiretap Trump's telephones.

The problem is the dossier has been largely discredited. Yet according to the Nunes memo that memo was used to petition the FISA Court (Foreign Intelligence Surveillance Act) for legal authority to tap an American citizens phone. The memo also claims the petition left out key facts about the FISA application that were



IN MY
OPINION
Bill Forhan
Publisher

material to the courts decision to authorize the surveillance. Facts like the dossier was paid for by the opposition party. Facts like the dossier was never independently corroborated.

At this point one could question why the FISA court judge, whoever that might have been, didn't question the application. The identity of the judge is not to be released for security reasons, but that individual would have to be living on a different planet not to know Trump was a Presidential contender.

We may never know who the judge was or why that individual didn't question the documents supporting the application.

What we do know is that given the tainted nature of the FISA Court application the entire matter is legally flawed.

Think of it like you are charged with a crime but never read your Miranda rights. The result is your case is thrown out. Those laws are written to protect us from abuse by the government.

This scandal is another case of how easy it is for the party in power to abuse that power. It is no different than Watergate. It's just another party at another time in our history trying to hang onto their power any way they can.

It is also time to end this ridiculous "Russia Conspiracy" probe. It has been a year with no evidence and only a handful of people being indicted for such heinous crimes as "lying to the FBI." Apparently, the FBI can lie and distort the truth with impunity.

That is not how our American justice system is supposed to work and all of those who were involved in this scandal need to be removed from office and permanently barred from public service. They need to lose their government pensions and many need to go to jail for breaking the laws they were charged to uphold.

Future government employees need to understand they are not above the law. It was true for the Republicans involved in Watergate and it must also be true for the Democrats involved in this scandal.

For Legislative News
check our website
www.lakechelanmirror.com,
under Free news

OBITUARY & MEMORIAL POLICIES

NCW MEDIA, INC.

An obituary is a way for family member(s) to commemorate a loved one's life and to notify the larger community of the deceased. Obituaries are also used for historical and ancestral data.

Memorials are another way of letting the community know about the life and memories of the person who has died. A Memorial is different from an obituary. An obituary is usually current while a memorial can be written later.

Obituaries and memorials need to be typed and emailed no later than Friday by 4:00 p.m. to be placed in the next available issue(s). Please call for cost of an obituary and which NCW paper(s) that it will be placed in to.

Cost of the obituary/ memorial is due at the time of placement. Funeral homes and chapels can submit obituaries by Noon on Monday, unless a holiday.

Obituaries are priced per word while Memorial ads are per column-inch.

For info call Ruth 509-682-2213, or email ruthk@lakechelanmirror.com

CHURCH GUIDE

New to the area? On Vacation?
These churches welcome you!



• CHELAN

BEREA BAPTIST CHURCH KJV
Sunday School 10 am • Sunday Services 11 am & 6 pm
Children's Church 11 am • Wednesday Evening 7 pm
"Church the way it used to be"
515 E. Woodin Ave. • 682-5831
Pastor Keith Rife

CHELAN CHRISTIAN CHURCH

Sunday School 9 am
Morning Worship 10 am
682-2025 • 210 E. Wapato Ave.
Pastor Mark Wilton

CHURCH OF THE NAZARENE

Sunday School 10 am
Worship 11 am & 6 pm
Youth Group - Friday 7 pm for 13-18 years of age
682-5135 • Sanders St. & Okanogan Ave.

LAKE CHELAN LUTHERAN CHURCH

Worship 9:30 am
Sunday School following Worship Service
682-9063 • 216 W. Nixon Ave.

LAKE CHELAN UNITED METHODIST CHURCH

Worship 11 am
682-2241
Corner of Johnson & Emerson

• CHELAN

LIVING STONE CHURCH

GATHERING IN OUR UNIQUENESS,
UNITED IN OUR PURPOSE
SUNDAY SERVICES
the 9:00 am Gathering • the 10:30 am Gathering
Adult Bible Study, Children's Church, Nursery 10:30 am
the Exchange - Middle & High School Youth Service
WEDNESDAYS
Kids ROCK 6:10-7:40 pm (4 years thru 5th grade)
Oct-April (except school breaks & holidays)
Prayer Time 7:00 pm
Scott Morris, Senior Pastor
Jeffrey Chambers, Youth Pastor
2133 W. Woodin Avenue, Chelan * 509-682-5953
For more information visit www.lscchelan.org

SEVENTH-DAY ADVENTIST CHURCH

Worship Saturday 9:30 am
Bible Study Hour Saturday 11 am
682-5622 • 107 E. Highland Ave

ST. ANDREW'S EPISCOPAL CHURCH

Worship 10 am
120 E. Woodin Ave., PO Box 1226, Chelan, WA 98816
682-2851 • www.standrews-chelan.org

• CHELAN

ST. FRANCIS DE SALES CATHOLIC CHURCH

English Mass Saturday 5 pm • Spanish Mass Saturday 7 pm
English Mass Sunday 9 am
Spanish Mass Sunday Noon
Rev. Rogelio Gutierrez, Pastor
682-2433 • Next to Safeway

• ENTIAT

ENTIAT FRIENDS CHURCH

Pastor Mark McDonald
2848 Entiat River Road • 509-784-1342
Sunday Morning Bible Class 9:45 a.m.
Sunday Morning Worship 10am
Sunday Prayer Group 7pm
Wednesday Shared Dinner 6 pm
Wednesday Children's Program/Youth Group
and Adult Bible Study 7 pm

WAREHOUSE COMMUNITY CHURCH

Group Life Sunday School 9:30 am
Worship Celebration Service 10:45 am
412 Youth Group Wednesday 6:30 pm
Pastor Barry Mooney
784-2710 • 14916 Hwy 97A
www.warehousecommunitychurch.com

• MANSON

MANSON UNITED METHODIST COMMUNITY CHURCH

Sunday Worship 9 am
With coffee following service
687-3311
Green & Boetzkes
'We are a come as you are church'

NORTH SHORE BIBLE CHURCH

Sunday Worship 9:30 am
Nursery (birth - 3 years) 9:30 am
Kidz Church (4 years-5th Grade) 9:30 am
687-3636 • 123 Wapato Point Parkway
www.northshorebc.org
Craig Rayment, Sr. Pastor

• BREWSTER

HOPE LUTHERAN CHURCH - LCMS

Sunday Worship 11 am
Holy Communion 1st, 3rd, & 5th Sunday
Bible Study & Sunday School 10 am
689-3106 • 1520 Sunset Drive
Kevin Moore, Pastor

"With men this is impossible;

but with God all things are possible." -Matthew 19:26

TO PLACE YOUR CHURCH IN THIS GUIDE: RUTH 682-2213 • ruthk@lakechelanmirror.com

NCW MARKET.COM

CLASSIFIED ADS

CORRECTIONS - NCW Media, Inc. shall be responsible for corrections to advertisements on the first publication only. The advertiser will be responsible for corrections made thereafter. NCW Media, Inc. shall not be responsible for slight changes or typographical errors that do not lessen the value of the advertisement. NCW Media, Inc.'s liability for other errors or omissions in connection with an advertisement is strictly limited to the publication of the advertisement in any subsequent issue. No monetary refunds will be given. For more information call 548-5286

PUBLISHER'S NOTICE
 All real estate advertising in this newspaper is subject to the Fair Housing Act, which makes it illegal to advertise "any preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin, or an intention to make any such preference, limitation or discrimination." This newspaper will not knowingly accept any advertising for real estate that is in violation of the law. To complain of discrimination call HUD at 1-800-669-9777. The number for hearing impaired is 1-800-927-9275.

ORCHARDS & FARMS

We have buyers for your Pear, Apple and Cherry Orchards!



509-669-4500
 information@nwi.net

BUSINESS OPPORTUNITY



Owner Retiring

Rare opportunity to purchase established business. Loyal clientele, excellent reputation.

Kashmir Gardens Florist, a Cashmere mainstay since 1949, is for sale.

Sale includes equipment, inventory, display pieces. The building is also for sale separately.

509-782-2071

SERVICES



Lucy's House Cleaning

Home-Apartment-Office and more!

Honest - Reliable
 References available

Call or text Sendi

509-630-2594

sendivasquez1@gmail.com

ANNOUNCEMENTS

HELP!

Publishing is a new world

It's not just ink on paper anymore.

In today's world we need your email address so we can serve you more efficiently.

Please send an email to Kristie at

circulation@lakechelanmirror.com

Today!

HAPPY ADS

ANNOUNCE IT IN THE CLASSIFIEDS

AT NCWMarket.com

***HAPPY BIRTHDAY**
***CONGRATULATIONS!**
*** WILL YOU MARRY ME?**
***I'M SORRY!!**

Or

***HAPPY ANNIVERSARY**

Only \$15 for 30 days

includes 3 photos

HELP WANTED

Brewster School District is accepting applications for two paraprofessionals to work 7 hours per day.

- EL Para – MS/HS Math Spanish Required
- ELA Para – Elementary Spanish Required

Starting wage for full time para positions is \$13.08 per hour. The qualified candidates are required to meet the following requirements:

- AA Degree or;
- 2 years of college course work (70 credits) documented with transcripts or;
- Pass the ETS paraprofessional test (given by the school)

The district is accepting applications for substitute paraprofessionals and substitute bus drivers. All positions are open until filled. EOE Employer

Busy year-round resort seeks temporary full-time Maintenance Tech. Apply at 305, 8 th Street Leavenworth, WA.

HELP WANTED

My Buddy's Place in Manson is now hiring for a full-time or part-time, year around cook. Wage DOE. Please apply to Alex or Buddy at 77 Wapato Way. Must be 21 to apply.

FAMILY HEALTH CENTERS
 YOUR FAMILY, YOUR HEALTH, YOUR CHOICE

Are you looking for a great place to work? We are looking for you to join our team!

Bridgeport: Behavioral Health Specialist – part-time or full-time

Brewster: Behavioral Health Specialist – full-time

Brewster Dental Dental Patient Registration Rep – full-time – Bilingual required

Dental Clinics: Must be available Saturdays
Dental Assistants - (5) Per Diem (as needed basis) Bilingual required– All locations
Dental Hygienist – full-time and/ or Per Diem

Okanogan: Medical Schedulers – (4) full-time positions – Bilingual Required

Omak: Pharmacy Technician – full-time
MA-R/ Phlebotomist – full-time
MA-C or LPN – full-time

Tonasket: Certified Nurse Midwife – full-time, Bilingual preferred

See www.myfamilyhealth.org for job descriptions. Submit cover letter, resume and application to FHC, c/o Human Resources, PO Box 1340, Okanogan, WA 98840 or email: HR@myfamilyhealth.org. Open until filled. FHC is an EOE Employer.



Cascade School District is seeking qualified applicants for the following position:

• **Cascade High School Varsity Volleyball Coach**

Fast Track application process and additional information can be found on our website at: www.cascadesd.org EOE

HELP WANTED

The Lookout is currently seeking an energetic, organized and responsible team member to direct and oversee all maintenance activities of our HOA and home property management company. The ideal candidate will have education and experience in landscaping, grounds maintenance, and mechanical/technical work along with excellent leadership and supervisory skills. 509-888-7677



Slidewaters Chelan, WA Summer Job Guard or Kitchen Team
 Join the Slidewaters Team this summer and enjoy competitive wages, bonuses and fun team oriented work environment. Visit <https://www.slidewaters.com/lcm-team-member-opportunities> for more information.

JOB FAIR



EPIC is now hiring for multiple positions! We will be hosting a job fair at our Bridgeport Site 1400 Columbia Ave from 10:00am – 2:00pm Saturday February 17, 2018. For more information please visit our website at www.epicnet.org.

Find the Best Qualified Local Employee in our Classifieds Ads. Your ad will appear online and in the newspaper for one low price.

Deadline Monday at noon
Lake Chelan Mirror 682-2213
 mirrords@lakechelanmirror.com
Leavenworth/ Cashmere 509-548-5286
 classifieds@leavenworthecho.com
 Deadline Tuesday at noon
Quad City Herald 509-689-2507
 heraldads@qcherald.com
 All Classified Ads go in all of our newspapers

See MORE CLASSIFIEDS & PUBLIC NOTICES on Page A8

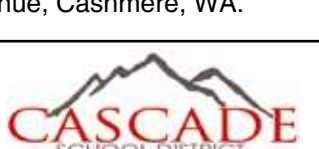
HELP WANTED



Executive Director, Lake Chelan Valley Habitat for Humanity
 Salary - DOE
 To apply, submit cover letter, resume, and contact information for 3 references. Email to chelanvalleyhabitat@gmail.com or mail: PO Box 911, Chelan WA 98816-0911. Applications must be received by Feb. 15, 2018. EOE
 For job qualifications see our ad on ncwmarket.com



Come be a part of a growing team-Where care is the center of our focus. Seeking Licensed Nurses and Certified Nursing Assistants. Opportunity for growth, leadership and consistent schedule in resident centered culture. Apply at Cashmere Care Center, 817 Pioneer Avenue, Cashmere, WA.



The Cascade School District is seeking qualified applicants for the following positions:

Cascade High School Spanish Teacher

Icicle River Middle School Counselor Non-Continuing

To apply go to www.cascadesd.org EOE

PUZZLE SOLUTION

S	C	A	M	P	E	S	P	R	O	A	M		
T	O	R	A	H	B	O	O	B	I	L	B		
E	D	I	F	I	O	B	I	O	S	I	E		
M	A	D	I	S	O	N	L	I	N	C	O	L	N
A	I	M	B	U	L	B							
G	S	A	O	B	O	E	L	O	O	K	I	N	
R	A	C	E	R	A	G	E	N	A	O	M	I	
A	V	I	D	E	T	U	D	E	F	L	A	X	
N	O	N	E	T	H	I	D	E	S	A	G	O	
T	R	I	N	A	L	N	O	R	M	S	E	N	
R	A	K	E	I	O	N							
J	O	H	N	S	O	N	G	E	N	E	S	I	S
A	D	I	E	U	O	I	L	R	H	O	N	E	
V	O	L	T	S	C	I	A	O	R	A	T	E	
A	R	T	S	K	I	D	E	U	R	O	S		



PUZZLE SOLUTION

8	9	2	7	4	3	1	6	5
4	5	6	1	8	9	3	7	2
3	1	7	5	2	6	4	8	9
7	2	8	6	3	1	9	5	4
1	4	5	9	7	2	6	3	8
9	6	3	4	5	8	2	1	7
2	7	4	3	6	5	8	9	1
5	3	9	8	1	4	7	2	6
6	8	1	2	9	7	5	4	3

APPLIANCES

Pocket some cash by selling your used appliances with a classified ad.
 Your ad will appear online and in the newspaper for one low price.
 Deadline Monday at noon
Lake Chelan Mirror 682-2213
 mirrords@lakechelanmirror.com
Leavenworth Cashmere 509-548-5286
 classifieds@leavenworthecho.com
 Deadline Tuesday at noon
Quad City Herald 509-689-2507
 heraldads@qcherald.com
 All Classified Ads go in all of our newspapers

ANTIQUES & COLLECTIBLES

Get cold hard cash for your Antiques by placing them for sale in a classified ad.
 Your ad will appear online and in the newspaper for one low price.
 Deadline Monday at noon
Lake Chelan Mirror 682-2213
 mirrords@lakechelanmirror.com
Leavenworth Cashmere 509-548-5286
 classifieds@leavenworthecho.com
 Deadline Tuesday at noon
Quad City Herald 509-689-2507
 heraldads@qcherald.com
 All Classified Ads go in all of our newspapers

Looking for a deal?

You'll find it in the Classified Ads!

SUDOKU PUZZLE

SUDOKU

The support you need to find quality SENIOR LIVING SOLUTIONS

A Place for Mom has helped over one million families find senior living solutions that meet their unique needs.

There's no cost to you!
CALL (855) 439-6734
 *We're paid by our partner communities.

	9		7		1						
4			1		9						2
				2					8	9	
							9	5	4		
9	6	3									
2	7			6							
5			8		4						6
		1			7				4		

© StatePoint Media
 Fill in the blank squares in the grid, making sure that every row, column and 3-by-3 box includes all digits 1 through 9.

CROSSWORD PUZZLE

CROSSWORD

1	2	3	4	5	6	7	8	9	10	11	12		
13					14				15				
16					17				18				
19					20			21	22				
23					24								
25	26	27			28			29	30	31	32	33	34
35					36				37				
38					39				40				
41					42				43				
44					45				46				
47					48				49				
50					51				52				
53					54				55				
56					57				58				
59					60				61				
62					63				64				
65					66				67				
68					69				70				
71					72				73				
74					75				76				

DISH DEALS!!

190 Channels Now only...
\$49.99/mo.

ADD HIGH-SPEED INTERNET
\$14.95/mo.

CALL TODAY PROMO CODE: FreeEchoDot
1-888-416-7103

Switch to DISH and Get a FREE Echo Dot

THEME: U.S. PRESIDENTS

ACROSS

- Little rascal
- 6th sense?
- Cell status
- Pentateuch
- "To Kill a Mockingbird" recluse
- Most famous hobbit
- Enlighten
- Wan
- Willow tree
- "Smallest President"
- "Oh Captain, My Captain"
- Prepare to shoot
- Tulip's early stage
- Geological Society of America
- Symphony member
- Hank Williams' "Hey Good"
- "Pre-election commotion"
- Unpleasant road display
- Actress Watts
- Full of enthusiasm
- Musician's exercise
- Seedy source of Omega-3s
- Nine musicians
- What those on the lam do
- Kind of palm
- Threefold
- Accepted behavior
- "Barack Obama's former title"
- Toothy tool
- Ht, e.g.
- "Lincoln follower"
- First book of Old Testament
- Bye to Emmanuel Macron
- It doesn't mix with water
- French wine region
- Battery units
- Spy org.
- Emulate Demosthenes
- Liberal pursuits
- Baby goat
- Continental money

DOWN

- Education acronym
- Musical finale
- Extra dry
- Godfather's family
- gnomy or logy
- Jet black
- Have a bawl
- Southern chicken stew
- CISC alternative
- Hodgepodge
- Cain's brother
- Between dawn and noon
- Candy in Paris
- Spaniard without "h"
- The Jackson 5's "Be There"
- Cole Porter's "Begin the"
- "He commanded the Union army"
- Enjoy yumminess
- Raspberru drupelets
- of office
- Stumblebums
- Caffeine-containing nut tree, pl.
- Candidate's concern
- *First US president to resign
- Raspberru drupelets
- Happy
- Fly like an eagle
- A fan of
- Gets the picture
- Roman three

PUBLIC NOTICES

LEGAL ADVERTISEMENT NOTICE OF INTENT TO LEASE SURPLUS REAL PROPERTY

NOTICE IS HEREBY GIVEN that the Board of Directors (the "Board") of Eastmont School District No. 206, Douglas County, Washington (the "District") intends to lease certain real property owned by the District and generally described as an approximately 34 acre, non-organic apple orchard containing the following varieties of apples: (a) 15.4 acres of gala apples approximately 20 years old, and (b) 18.9 acres of granny smith apples approximately 20 years old (collectively, the "Real Property"). After August 1, 2018, no conventional chemicals/fertilizers will be applied to the Real Property. The Real Property is located at 2125 6th Street SE, East Wenatchee, Washington. The Real Property is not currently required for school purposes, and therefore, the Board has determined that the Real Property is "surplus" property. The District intends to lease the Real Property for orchard purposes until the District requires the use of the Real Property for school purposes pursuant to an orchard lease agreement, a form of which is available upon request and which contains all of the terms and conditions of the lease. The lease of the Real Property for orchard purposes will not interfere with the conduct of the District's educational programs and related activities. Prospective tenants shall execute a copy of the orchard lease agreement and complete a proposal response form regarding the prospective tenant's qualifications to operate the Real Property (which is available upon request). Such an executed orchard lease agreement shall constitute an offer to lease with the District and does not become a legally binding contract until the Board accepts the orchard lease agreement as given. The District may reject any and all responses and may waive informalities or irregularities in the proposal process. The Board shall publicly open and read aloud all responses and award the lease to the most qualified prospective tenant at the meeting of the Board to be held at Sterling School, 600 James Street, East Wenatchee, at 5:30 P.M. on March 12, 2018. All unaccepted responses shall thereafter be null and void. The rental for the Real Property is based on the Annual Net Operating Income as follows: (a) if the Annual Net Operating Income is less than or equal to \$50,000, 30% to the District, and (b) if the Annual Net Operating Income is greater than \$50,000, 40% to the District. For the purposes of the lease, "Annual Net Operating Income" means process from the sale of all fruit harvested from the Real Property in a given crop year less all of the ordinary and necessary expenses incurred (for example, but not limited to, brokerage, storage and packing charges) in that same crop year in connection with the growing and harvesting of the fruit from the Real Property. The deadline for submission of sealed responses for the lease of the Real Property is 2:00 P.M., March 12, 2018. Proposals shall be submitted to the Eastmont School District Administration Office which is located at 800 Eastmont Avenue, East Wenatchee, Washington 98802 and should be marked "Apple Orchard Lease." For further information or to request a copy of the proposed orchard lease agreement and the proposal response form, please contact Cindy Ulrich, Executive Director of Financial Services, Eastmont School District No. 206, at (509) 888-4686 or ulrichc@eastmont206.org. Published in the Lake Chelan Mirror January 31 and February 7, 2018. #81026

Notice of Public Hearing VAR2017-04 Fisher Garage February 2nd, 2018

On December 7th, 2017 the City of Chelan received a Variance application for a detached garage located at 318 SR 150, which was deemed complete on December 14th, 2017. **Project Applicant:** Scott and Lucia Fisher, 703-A 122nd Ave NE, Bellevue, WA, 98005 **Project Location:** 318 SR 150, Chelan, WA, 98816; Chelan County Parcel No: 272204440300 **Project Description:** Detached garage associated with a single-family residence **NOTICE IS HEREBY GIVEN** that a public hearing will be held before the Hearing Examiner at 10:00 a.m. on February 27th, 2018 in the Council Chambers at 135 East Johnson, Chelan, WA. Any person has the right to provide testimony at the public hearing. Written comments may be submitted prior to the hearing. Please address any specific and factual comments about the project to Joey Meisenheimer at the Community Development Department, P. O. Box 1669, Chelan, WA 98816. The project application may be reviewed at the City Planning Department during regular business hours. Copies of the application, staff report, and applicable criteria will be provided at the applicant's cost. Published in the Lake Chelan Mirror on February 7, 2018. #81139

PUBLIC NOTICES

Notice of Public Hearing CUP2017-011 Sterling Bed and Breakfast February 2nd, 2018

On December 11th, 2017 the City of Chelan received a Conditional Use Permit application for a Bed and Breakfast which was deemed complete on December 15, 2017. **Project Applicant:** Bill and Merry Sterling, PO BOX 551, Manson, WA 98831. **Project Location:** 368 SR 150, Chelan, WA 98816; Chelan County Parcel No: 272204310860 **Project Description:** Bed and Breakfast within an existing single-family home. **NOTICE IS HEREBY GIVEN** that a public hearing will be held before the Hearing Examiner at 10:00 a.m. on February 27th, 2018 in the Council Chambers at 135 East Johnson, Chelan, WA. Any person has the right to provide testimony at the public hearing. Written comments may be submitted prior to the hearing. Please address any specific and factual comments about the project to Joey Meisenheimer at the Community Development Department, P. O. Box 1669, Chelan, WA 98816. The project application may be reviewed at the City Planning Department during regular business hours. Copies of the application, staff report, and applicable criteria will be provided at the applicant's cost. Published in the Lake Chelan Mirror on February 7, 2018. #81138

DETERMINATION OF NONSIGNIFICANCE February 2nd, 2018 SEPA2018-01 Hughbank Land Leveling

Description of proposal: The project will be excavating approximately 700 cubic yards of dirt and disposing at an approved off-site dump location. **Applicant:** Chris and Casmisha Hughbank, 738 Golf Course Drive, Chelan, WA, 98816 **Location of proposal:** 736 Golf Course Drive, Chelan, WA, 98816. **Parcel Number:** 272211560010 **Lead Agency:** City of Chelan The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request. This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below. **Comments must be submitted by February 16, 2018** Published in the Lake Chelan Mirror on February 7, 2018. #81140

SUPERIOR COURT OF WASHINGTON FOR LINCOLN COUNTY In the matter of the Estate of:

Ethel Badten, Deceased
NO. 18 4 00004 0
Probate Notice to Creditors
RCW 11.40.030
The Personal Representative named below has been appointed as personal representative of this estate. Any person having a claim against the decedent's death must, before the time the claim would be barred by any otherwise applicable statute of limitations, present the claim in the manner as provided in RCW 11.40.070 by serving on or mailing to the personal representative or the personal representative's attorneys at the address stated below a copy of the claim and filing the original of the claim with the Clerk of this Court. The claim must be presented within the later of (1) thirty days after the Personal Representative served or mailed the Notice to the Creditor as provided under RCW 11.40.020(3); or (2) four months after the date of first publication of this notice. If the claim is not presented within this time frame, the claim will be forever barred, except as otherwise provided in RCW Section 11 and RCW 11.40.060. This bar is effective as to claims against both the decedent's probate and nonprobate assets. Date of First Publication: 1/24/18
Personal Representative: Gale Badten
Attorney for P.R.: Norman D. Brock
Address for Mailing or Service: Brock Law Firm, P.S. 529 Morgan St., P.O. Box 249 Davenport, WA 99122
Gale Badten
Personal Representative
Published in the Lake Chelan Mirror on January 24,31 and February 7,2018. #80983

PUBLIC NOTICES

IN THE SUPERIOR COURT OF WASHINGTON COUNTY OF CHELAN

Estate of PAULINE J. ANDERSON, Deceased.
NO. 18-4-00028-1
PROBATE NOTICE TO CREDITORS
RCW 11.40.030
The personal representative named below has been appointed as personal representative of this estate. Any person having a claim against the decedent must, before the time the claim would be barred by any otherwise applicable statute of limitations, present the claim in the manner as provided in RCW 11.40.070 by serving on or mailing to the personal representative or the personal representative's attorney at the address stated below a copy of the claim and filing the original of the claim with the court. The claim must be presented within the later of: (1) Thirty days after the personal representative served or mailed the notice to the creditor as provided under RCW 11.40.020(3); or (2) four months after the date of first publication of the notice. If the claim is not presented within this time frame, the claim is forever barred, except as otherwise provided in RCW 11.40.051 and 11.40.060. This bar is effective as to claims against both the decedent's probate and nonprobate assets. **DATE OF FIRST PUBLICATION:** January 31, 2018
PERSONAL REPRESENTATIVE: Christoph K. Anderson
ATTORNEY FOR PERSONAL REPRESENTATIVE: Jeffrey T. Fehr
ADDRESS FOR MAILING OR SERVICE: Fehr Law Office, PLLC P.O. Box 1606 Chelan, WA 98816 509-682-4536
Court of probate proceedings and cause no.: Superior Court of Washington in and for Chelan County, Cause No. 18-4-00028-1. Published in the Lake Chelan Mirror on January 31 and February 7, 14, 2018. #81056

IN THE SUPERIOR COURT OF WASHINGTON COUNTY OF CHELAN

Estate of JACOB M. GOEHRY, Deceased.
NO. 18-4-00036-1
PROBATE NOTICE TO CREDITORS
RCW 11.40.030
The personal representative named below has been appointed as personal representative of this estate. Any person having a claim against the decedent must, before the time the claim would be barred by any otherwise applicable statute of limitations, present the claim in the manner as provided in RCW 11.40.070 by serving on or mailing to the personal representative or the personal representative's attorney at the address stated below a copy of the claim and filing the original of the claim with the court. The claim must be presented within the later of: (1) Thirty days after the personal representative served or mailed the notice to the creditor as provided under RCW 11.40.020(3); or (2) four months after the date of first publication of the notice. If the claim is not presented within this time frame, the claim is forever barred, except as otherwise provided in RCW 11.40.051 and 11.40.060. This bar is effective as to claims against both the decedent's probate and nonprobate assets. **DATE OF FIRST PUBLICATION:** February 7, 2018
PERSONAL REPRESENTATIVE: Kim D. Olsen
ATTORNEY FOR PERSONAL REPRESENTATIVE: Jeffrey T. Fehr
ADDRESS FOR MAILING OR SERVICE: Fehr Law Office, PLLC P.O. Box 1606 Chelan, WA 98816 509-682-4536
Court of probate proceedings and cause no.: Superior Court of Washington in and for Chelan County, Cause No. 18-4-00036-1. Published in the Lake Chelan Mirror February 7, 14, and 21, 2018. #81129

SHERIFF/FIRE/EMS REPORT

911 CALLS

Jan. 29
Agency assist reported on North Apple Blossom Drive, Chelan.
Warrant reported on Wapato Lake Road, Manson.
Domestic disturbance reported on East Allen Avenue, Chelan.
Sex offense reported at Entiat Way, Entiat.
Harass/Threat reported on West Gibson Avenue, Chelan.
Alarm reported at on Willow Point Road, Manson.
Jan. 30
Welfare check reported on East Johnson Avenue, Chelan.
911 reported on East Highland Avenue, Chelan.
Welfare check reported on West Gibson Avenue, Chelan.
Domestic disturbance reported on Chandler Road, Manson.
Theft reported on East Woodin Avenue, Chelan.
Traffic offense reported on State Route 150, Manson.

Jan. 31
Suspicious activity reported at on Entiat Way, Entiat.
Theft reported at on U.S. Highway 97A, Entiat.
Runaway reported on Harvey Lewis Lane, Manson.
Public assist reported on East Woodin Avenue, Chelan.

Feb. 1
Public assist reported on East Woodin Avenue, Chelan.
Suspicious activity reported at on Wapato Lake Road, Manson.
Parking/abandon reported at 14449 U.S. Highway 97A, Entiat.
Suspicious activity reported at on Entiat Way, Entiat.
Suicide threat reported on South Sanders Street, Chelan.
Civil issue reported on South Emerson Street, Chelan.

FIRE/EMS

Jan. 29
Fall reported on East Highland Avenue, Chelan County Fire

& and Chelan Emergency Medical Services responded.
Cardiac reported at 108 North Apple Blossom Drive, CCF7 and CEMS responded.
Transfer reported on East Highland Avenue, CEMS responded.
Sick person reported on East Allen Avenue, CCF7 and CEMs responded.

Jan.31
Sick person reported on East Johnson Avenue, CCF7 and CEMS responded.
Transfer reported from Lake Chelan Community Hospital to Central Washington Hospital, CEMS responded.

Feb. 2
Structure fire reported at 2710 First Creek Road, CCF7 and CEMS responded.
Breathing problem reported on Green Avenue, CEMS responded.
Transfer reported from LCCH to CWH, CEMS responded.

American Red Cross seeking nominations for 'Hometown Heroes'

Deadline for nominations is Feb. 15

SUBMITTED BY MEGAN SNOW, AMERICAN RED CROSS

WENATCHEE - The American Red Cross is inviting nominations from the community for the "Hometown Heroes" among us. If you know of a local individual or organization who has done something courageous or exceptional that deserves recognition, please take the time to nominate them. Nominations will be accepted until Feb. 15.

Heroes may be professional rescuers, ordinary citizens or local groups/organizations. Nominees must live in or have performed their heroic act in Grant, Douglas, Chelan or Okanogan County within the last two years. Examples of

heroes include someone who has rescued another person from a dangerous situation, individuals or organizations who are addressing an unmet need in our community, or first responders (military, fire, police, etc.) whose actions have gone above and beyond the call of duty.

Members of the community are invited and encouraged to submit nominations. Nomination forms are available by calling (509) 663-3907 or contacting megan.snow@redcross.org. Nominations are also accepted online at <http://www.redcross.org/local/washington/news-events/events/heroes-breakfast/nominate>

Those nominees selected as a Hero award recipient by an independent panel of community leaders will be honored at the annual "Hometown Heroes Celebration" on Thursday, March 29 at the Wenatchee

Convention Center. If you have any questions or would like more information, please contact Megan Snow at (509) 990-0969. Media interviews regarding this event can be arranged.

About the American Red Cross:
The American Red Cross shelters, feeds and provides emotional support to victims of disasters; supplies nearly half of the nation's blood; teaches lifesaving skills; provides international humanitarian aid; and supports military members and their families. The Red Cross is a charitable organization — not a government agency — and depends on volunteers and the generosity of the American public to perform its mission. For more information, please visit www.redcross.org or join our blog at <http://blog.redcross.org>.

Practice your home escape plan

SUBMITTED BY THE WASHINGTON STATE FIRE MARSHALS OFFICE

OLYMPIA - We are only 31 days into the New Year and already there have been four fire fatalities in homes with no working smoke alarms. The State Fire Marshal's Office is encouraging every household to develop and practice a home escape plan. This is a critical component to giving you and your family the best chance of survival in a home fire emergency.

Here is what you can do to protect the ones you love:

- Sketch the floor plan of your home.
- Identify all doors, windows, and other possible emergency exits for every room in your home.

- Draw arrows to indicate your primary exits.
- With a different color, draw arrows to indicate secondary exits.
- Choose a meeting place outside of your home, and mark it on your escape plan.
- Write the emergency telephone number for the fire department on your escape plan.
- Twice a year, practice your escape plan with everyone living in your home.
- Keep your escape plan posted on the refrigerator.

To learn more about home escape planning and how to prevent home fires, visit the State Fire Marshal's website at: <http://www.wsp.wa.gov/fire/public/>

Selecting the correct fire extinguisher

SUBMITTED BY CHELAN FIRE & RESCUE

CHELAN -The National Fire Protection Association notes that portable fire extinguishers can "save lives and property by putting out a small fire or containing it until the fire department arrives, but portable extinguishers have limitations."

The three most commonly used fire extinguishers are air-pressurized water, carbon dioxide and multi-purpose/dry chemical. According to OSHA:

- Air-pressurized water extinguishers are designed to be used only on Class A fires (wood, paper, cloth, rubber and certain plastics). Never use an APW extinguisher

on flammable liquid fires, as it may make the situation worse, or electrical fires, as it may cause electrocution.

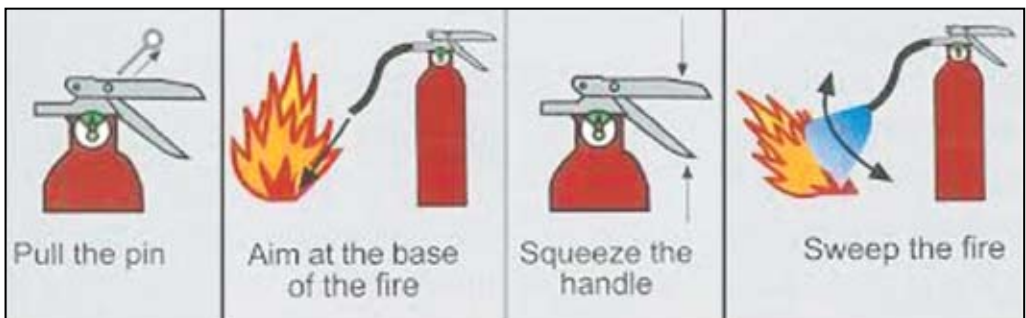
- Carbon dioxide extinguishers put out fires by displacing oxygen. Be aware that pieces of dry ice will shoot from the device. Carbon dioxide extinguishers are meant for use only on Class B fires (oils, gasoline, some paints, lacquers, grease, solvents and other flammable liquids) and Class C fires (electrical fires, including fires in wires, fuse boxes and energized electrical equipment).
- Multi-purpose/dry chemical extinguishers coat the fuel element with a thin layer of fire-retardant powder. OSHA notes. Although generally rated for Class B and C fires,

they may be marked as multi-purpose for use in Class A, B and C fires. All fire extinguishers will be marked with labeling that identifies what class of fire it can be used on.

To use a fire extinguisher; NFPA recommends remembering to "PASS":

- Pull the pin and hold the extinguisher with the nozzle pointed away from you, then release the locking mechanism.
- Aim low - point at the base of the fire.
- Squeeze the lever slowly.
- Sweep the nozzle in a side-to-side motion.

Source: www.safetyandhealthmagazine.com



NCW MARKET.COM CLASSIFIED ADS
Your one stop spot to reach all of North Central Washington with a few simple keystrokes.
BUSINESS JOURNAL
ECHO RECORD MIRROR HERALD
REDUCE REUSE RECYCLE

You've Got It! Somebody Wants It!

Horticulture 2018

72nd Lake Chelan Horticulture Day Wrap Up

Inside Story Index

- Woolly Apple Aphid 4
- Spotted Wing Drosophila 5
- Cosmic Crisp discussed 5
- Stink bug study 6
- Proper spray application 7
- Breaking down fiber 7

Fire blight identification, prevention, management explained



Gwen Hoheisel demonstrates calibration of a sprayer.

Photos courtesy of Tianna DuPont, WSU Extension

BY ERIN ROSSELL, STAFF WRITER

CHELAN – Fire blight, a disease effecting apple and pear trees, is caused by *Erwinia amylovora*, a rod-shaped bacterium. The bacteria grow by dividing, with a rapid division rate in temperatures 70 degrees and above. The disease can be detrimental to first and second leaf fruit trees and can overwinter in the

blight canker with 20 to 50 percent of the pathogen cells surviving into the next bloom period. The prevention and management of the disease was the focus of the presentation led by Tianna DuPont, of WSU Extension, during the Lake Chelan Horticultural Meeting, Monday, Jan. 15 at Chelan High School PAC.

One to two weeks after petal fall, visible symptoms appear on infected blossoms

resulting in a dull, gray-green appearance on the floral receptacle, ovary and peduncles. In infected shoots, rapid wilting may be visible and can “often show blackening along the midrib and veins before becoming fully necrotic,” according to the WSU Tree Fruit website, which also pointed out the key indicative feature of infected shoots being the clinging of the shoot “firmly to the host after death.” The

bacteria from the infected flower cluster move in the phloem of the plant tissue, explained DuPont, “much more quickly than you actually see symptoms.”

So, now the bacteria are moving in the phloem and you’re getting more and more infection, DuPont stated, “you’re concentrating in the shoot tips because the phloem is moving that direction.”

SEE BLIGHT ON PAGE B2

Proper weed I.D. is critical for maximum herbicide control

BY MIKE MALTAIS, STAFF WRITER

CHELAN – Weeds, while a nuisance to most agriculturalists, are highly adaptable living species in their own right and require an arsenal of research, identification, and understanding to best determine how to control their presence in crop environments.

Lynn Sosnoskie, a WSU weed scientist began her discussion at the 72nd Lake Chelan Horticulture Day with a primer on the various methods used to identify weeds.

One way is by growth form, whether a grass species or broadleaf species, said Sosnoskie. Another way is by life cycle; annual,

“The strategies that we use to manage weeds differ based on their life cycle,”

Lynn Sosnoskie, WSU weed scientist

biennial, or perennial. An annual weed, such as common lambsquarters, completes its life cycle within a single year.

A biennial, like wild carrot, occurs over two years, with a rosette forming the first year, dormancy over the

SEE WEED ID ON PAGE B2



Photo courtesy missouristate.edu

Common lambsquarters completes its life cycle within a single year.

Proprietary Variety Management team provides Cosmic Crisp updates for growers, consumers

Consumer, retailer excitement for the apple is out of this world

BY ERIN ROSSELL, STAFF WRITER

CHELAN – Washington State’s newest pride and joy in the apple varieties, the WA 38 “Cosmic Crisp”, has been a big topic throughout not only Chelan Valley, but all of Washington State, and was the basis of the presentation provided by Proprietary Variety Management (PVM) Vice-President Kevin Brandt and Director of Marketing and Operations Kathryn Grandy.

The Cosmic Crisp apple variety has been in the development process since 1998, when seeds were germinated and raised in a greenhouse until planting and eventually budding in 1999. The Enterprise-Honeycrisp offspring offers the beautiful red coloration that Washington Apples are well-known for, and the sweet crunch found in the honeycrisp. The pleasantly balanced sweet and tart taste of the Cosmic Crisp is not the only an excellent tasting apple, but it also maintains freshness longer, taking slower to brown when cut and

“maintains its texture and flavor in storage for more than a year,” according to the Cosmic Crisp website.

Brandt began the presentation with updates on the grower’s side of the spectrum, focusing on the purchasing, growing, sale and distribution of the Cosmic Crisp. A limited number of trees for WA 38 were made available to Washington State growers in 2017, whom were chosen by way of a drawing. There were only a limited amount available because there were only a limited number of budwood to grow trees, explained Brandt, “2018 is open to any Washington State grower, right now we have 5 million trees in the books.”

PVM has the rights to commercialize WA38, and in doing so has given the exclusive propagation rights to the Northwest Nursery Improvement Institute (NNII). At this time, the trees



Kevin Brandt, vice-president, Proprietary Variety Management (PVM)

can only be purchased through a participating NNII member nursery, in which 11 of the 13 member nurseries are participating in growing, propagating and selling the WA38 ‘Cosmic Crisp’ trees, he emphasized to the audience. You’re

allowed to propagate your own trees outside of purchasing from the NNII nurseries, Brandt explained, “but we have to do so in a specific manner,” he expressed, explaining, “what you have to remember is this is not an open variety ... it’s a managed variety. It’s patented, it’s trademarked, and it’s only available to Washington State growers for the next 10 years.” The propagation material, he continued to explain, can only be taken out of G1 through G4, that references certified material. “Once that leaves the nurseries and is put out into the orchards, that’s no longer considered



Photos courtesy of Kevin Brandt, Proprietary Variety Management

Cosmic Crisp apples.

certifiable,” he said, “the state does not certify anything that’s placed in the commercial orchards, so we can’t take any propagation off of that. We can take it off the trees in the nurseries, and the certifiable material.” If you’re considering propagating, you would need to obtain a one-time propagation agreement, said Brandt, “that one-time propagation agreement is given directly to you, you

can use that agreement to go to another nursery if you want.”

The budwood from the WA 38 is used in three ways. First, and most importantly, it is used to produce trees within the NNII network to supply the industry, then leftover budwood is used for grafting, and lastly, anything after that goes out to anyone who interested in individual tree propagation. There are no

propagation fees, explained Brandt, but there is a 25-cent industry support propagation fee “to give back to the research and industry”. You can also expect the standard budwood collection fee from the nurseries, that’s standard, but there’s nothing on top of that. Other fees that you may come across include a \$1 royalty fee. “That’s straight across,” he expressed, “when

SEE COSMIC ON PAGE B3



Researcher Jared Dean, with Tianna DuPont's lab team of WSU Extension, inoculates fire blight in order to look for new management tools.



Photos courtesy of Tianna DuPont, WSU Extension
A young branch of leaves displaying signs of a fire blight infection.

BLIGHT

CONTINUED FROM PAGE A1

The young, one to two-year-old tissue is susceptible and that's where you're getting those shoot tip infections, she explained. It could take weeks, or even up to two months after the shoots have those initial infections until you will be able to noticeably see a lot of blight in that block, and weeks until a canker in the infected area will be visible. Wind, hail and abrading can make it so the shoot tips are more likely to directly get infected from the bacteria, not from the cluster infection itself. "So, when you're out there pruning or braiding, that tender tissue," she began to explain, "when that tissue gets damaged is when that bacteria can directly infect, so that can be happening too, and you want to limit the abrasion

of that tissue as much as possible."

In the event of infection, first and second leaf trees/plants are generally best to just be pulled up, as opposed to treating and pruning. Due to the immaturity of the tree and the rapid growth of the younger plants, the infection is more likely to spread at a highly rapid rate. "If it's a really young tree, one to two years old, you're probably going to want to just cut that tree out because it's already moved through the phloem of the tree and it's probably not going to survive," DuPont



Tianna DuPont, WSU Extension

emphasized. On more mature plantings, the rule of thumb is to cut 12-18 inches below the visible canker, she pointed out, "but it depends on the variety and how young the tree is." If the space doesn't allow to cut that far below the canker, "consider making a stub cut or a dirty cut," DuPont suggested, "leaving four or five inches when you're cutting away from the main, central leader from the trunk." This will promote new growth which will receive the infection, instead of the central leader, in which case

you'd have to cut that tree out, she said.

In addition to cutting out the cankers, DuPont recommends treating with Actigard, a systemic acquired resistance (SAR), in addition to cutting out the infection and pruning. "This isn't a silver bullet," she expressed, "nothing is a silver bullet, but if we look at 10 years now of research, a couple things that it can be helpful with is reducing the total amount of wood needing to be cut out of a block, by about 80 percent," she said, then added, "the other thing that was impressive was looking at the number of trees that were killed by the fire blight. When they were just cutting and doing all the good pruning, but weren't using the Actigard, they were losing about 25 percent of the trees, and only about 10 percent of the trees when Actigard was used." DuPont clarified the

purpose of using Actigard, stating that it doesn't actually kill or cure the bacteria, but rather, acting as an immune system stimulator for the plant, it helps the plant to be stronger and fight off the infection.

After block treatment and cutting out the canker, you definitely want to be thoughtful about what you spray with, explained DuPont. "Oxytetracycline in particular," she began, "the way it works is that it's slowing down the bacteria from multiplying," but in younger trees, she advised using soluble coppers because "those actually do kill bacterial cells when they come into contact with them." Once the block has been treated, the canker has been cut out and the plant has been sprayed, focus on ensuring a complete clean-up to prevent chances of the bacteria returning.

Burning the cuttings, if possible, is best. However, if you are unable to burn, DuPont suggests removing the cuttings from the orchard or as far away from the block as possible and cover with a tarp.

The life span for fire blight in wood can vary based on the diameter of the tissue branch," she explained, "when the fire blight is in living tissue it can continue to live, but once that tissue is completely dried up and dead the fire blight cannot live in that anymore." For organic orchards, DuPont suggested fixed copper at delayed dormant, lime sulfur at early bloom, blossom protect or bloomtime biological.

More information on fire blight is available online at www.treefruit.wsu.edu or email questions to Tianna DuPont at tianna.dupont@wsu.edu.

WEED ID

CONTINUED FROM PAGE A1

winter, and a flowered seed stalk the second year.

A perennial, like quack grass, has a life span that exceeds two years.

Sosnoskie explained the importance of knowing these weed differences: "The strategies that we use to manage weeds differ based on their life cycle," said Sosnoskie. "Our strategies aren't equally

effective against all weed species."

Since herbicides differ in their selectivity, the spectrum of weeds they can control, a sound knowledge of the weed type under consideration is essential for effective results. And it gets even more technical. Weed species, even closely related ones like purple nutsedge and yellow nutsedge, can vary in their sensitivity to herbicides.

Sosnoskie recommended two books she prefers as

reference tools to help growers identify weed species.

- Weeds of the West published by the University of Wyoming Agricultural Extension is a guide to weeds in Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming. Its 900 color photographs show both early growth and mature plants and which ones complete with crops and those poisonous to people and livestock.

- Weeds of California and Other Western States (2 volumes) provides full description of 451 species plus an additional 361 plants. Shortcut identification tables, grass identification keys, and more than 60 tables comparing difficult-to-distinguish weedy species help the user navigate the many aspects of habitat, seed dispersal, methods of reproduction, longevity and

many other traits.

An ID Weeds App, created by the University of Missouri for smartphones is also now available. The app allows the user to input weed characteristics such as grass or broadleaf, where found, leaf and stem details, and other data and then pulls up images and information about possible matches. It also allows searches for specific weed species from an alphabetized list.

Another phone app, Pl@ntNet App, developed in France, allows the user to upload a photo of a leaf, flower, fruit or bark for comparison against a database of images.

Closer to home, Sosnoskie revealed some distinguishing characteristics between two major classes of weeds in Washington State: grasses and broadleaves. Her explanations, while easy to follow with the help of visual aids that focused on specific plant parts and patterns, emphasized the importance of dedicated dirt time paired with a comprehensive reference manual if one is really determined to understand and identify the world of weeds.

A perennial, like quack grass, has a life span that exceeds two years.

SOLUTIONS TO HELP YOU BUILD AND GROW.

Offering ... • Life Insurance • Long-Term Care • Annuities
• Disability Income Protection • Health Insurance
• Medicare Supplements, Advantage & RX plans

Give me a call **509-888-9038**

www.kellyalleninsurance.com Kelly Allen



Photo by Mike Maltais
Lynn Sosnoskie is a weed scientist with the WSU Extension Service.

AgrIMACS Inc.

Agricultural Management and Consulting Services

SERVING ALL YOUR PROPERTY MANAGEMENT NEEDS

Orchard Management
Horticulture Consulting
Financial Consulting
Orchard Real Estate Service

Please contact us at:
509.888.5066
Chelan, WA
Tim McLaughlin and Tom Gausman
www.agrimacs.com

Horticulture 2018
72nd Lake Chelan Horticultural Day Wrapup

Published by NCW Media, Inc.: Publishers of The Leavenworth Echo, Cashmere Valley Record, Lake Chelan Mirror, Quad City Herald & Wenatchee Business Journal

Publisher: Bill Forhan • Ad Director: Carol Forhan
• Managing Editor Gary Bégin

Reporters: Erin Rossell, Mike Maltais, Mikaila Wilkerson, Ian Dunn
Art & Production Design: RuthEdna Keys, Lindsey Douglas
Ad Executives: Lindsay Timmermans, RuthEdna Keys

P.O. Box 249,
310 E. Johnson Ave.,
Chelan, WA 98816 • 509-682-2213
©2018 NCW Media, Inc.

COSMIC

CONTINUED FROM PAGE B1

you buy that tree, when you propagate that tree, it's \$1." When you take it into the packing house, however, there is a 4.75 percent (of total box sale price) production fee, which only applies "if it's \$20 or higher," said Brandt, "if it's below \$20 then there's no production fee. The total production fee amount will be deducted from the packing house returns to the grower, which is configured through a database used by the packers, so the growers will not need to figure the fee out themselves. "The reason for that (the fee or waiving of the fee), is that the growers need to make money and the industry needs to make money," he explained.

Washington State grown fruit is unrestricted with marketing, including marketing for the Cosmic Crisp apple. Brandt explained that the fruit can be marketed anywhere in the world with the appropriate licensing. "There will be peer-to-peer marketing," he began, "we will need to make sure we have (trademark) protection in those other countries though." If you choose to sell your own fruit, rather than going to a packing house, you can do so by checking a box within the grower agreement. The selling "of one's own fruit is termed 'farmgate sales' within the WA 38 grower agreement," explained Brandt. The grower will still be receiving the standard \$1 royalty fee per tree, however because a packing house isn't being used and a production fee is not being charged by the packer, the grower will instead see a production royalty fee of \$2 per tree, per year. The production royalty fee differs from the production fee from a packing house in that it is a flat \$2 per tree rate, as opposed to a fee of 4.75 percent of the selling price of each box over \$20.

When you bring your fruit to the packer of your choice, as long as they are in Washington State, you will need to bring your grower agreement with you and present it to

the packer. Your grower's agreement, which is generated at random by the Idyia database system and specific to you, will track how much fruit you're bringing in and calculate the 4.75 percent growers' royalty fee, so there's no need for manual calculation, eliminating the chance of cost error. The Idyia database "works with all ends of WA 38," Brandt stated, "all the way from production to the marketing desk." So, when a grower orders from the nursery, they will input all the information, such as type and quantity of rootstock ordered, and generate a license number that is specific to you. So, every time you order, it will track how many of the rootstock you have purchased to date. The database system, as well as informative seminars for growers on regulations, rules and trademarking help protect the intellectual property on Cosmic Crisp.



Kathryn Grandy, Director of Marketing and Operations, Proprietary Variety Management

Concluding his portion of the presentation, Brandt expressed his excitement for the new apple, "together, through the nurseries, the grower, the packer, the marketing desk, we think we've got something put together for a truly premium variety, so we can actually get some really good premium prices."

Kathryn Grandy, Director of Marketing and Operations with PVM then took the stage and provided an update on the marketing and public relations (PR) aspect of acquiring demand for the produce. "As you can see from Kevin's presentation," she began, "we are going to have a very large volume of Cosmic Crisp to the market, very quickly. So, my responsibility is to create a very dynamic marketing system to support the growers' efforts in Washington, and to raise consumer awareness

and consumer demand very quickly for Cosmic Crisp, as well as work with the sales and marketing companies in the state of Washington to create trade and retail programs." Represented by nearly 95 percent of the apple industry in the state of Washington, the marketing advisory group meets quarterly to discuss items such as marketing, growing and quality standards for the Cosmic Crisp. Within the marketing committee is a subcommittee specifically for focusing on quality standards, explained Grandy. "The industry has made the decision to manage the variety as an industry," she said, and the growers, with the assistance of Washington State Department of Agriculture as well, are working with the group to create quality standards for Cosmic Crisp. One of the industry standards includes the branding of Cosmic Crisp. "Right now, 38.5 percent of products within the produce department are branded," Grandy explained, "and that's a huge growing trend, but the disconnect is that 55 percent of shoppers go into the store without a specific brand in mind." There's a lot of competition for the "shelf space" in shopping markets with all the new apple varieties, she stated, adding that will the competitive knowledge, the marketing committee decided to proceed with a standard brand across all companies. After completing consumer focus groups and sensory testing, the Cosmic Crisp name and logo were developed. "It's the first apple brand ever developed by consumers," Grandy expressed, "and the industry took that and

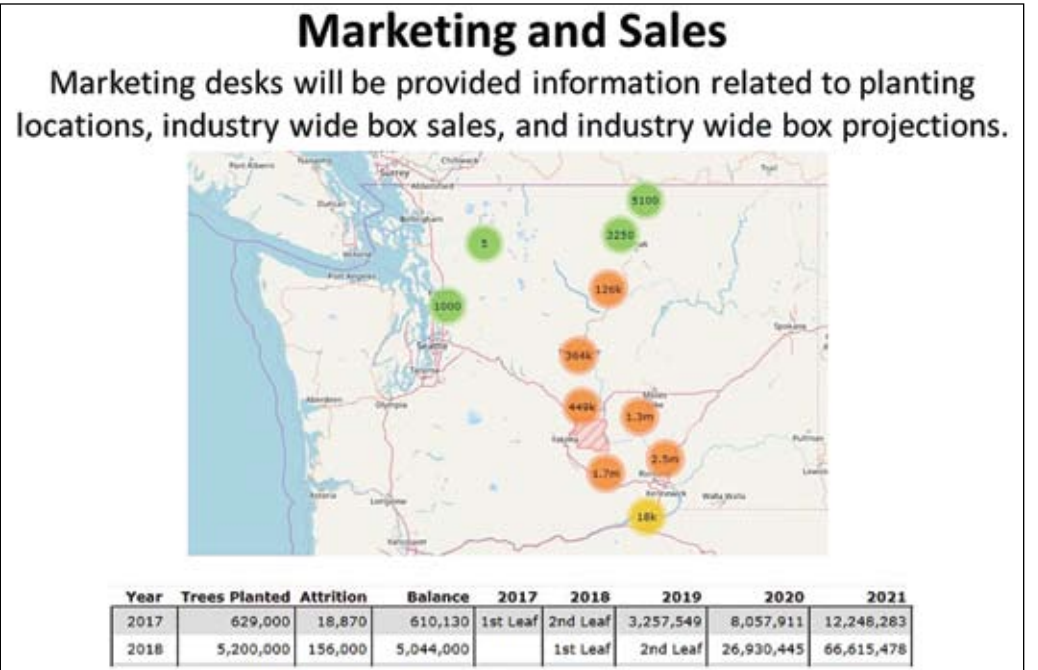
group meets quarterly to discuss items such as marketing, growing and quality standards for the Cosmic Crisp. Within the marketing committee is a subcommittee specifically for focusing on quality standards, explained Grandy. "The industry has made the decision to manage the variety as an industry," she said, and the growers, with the assistance of Washington State Department of Agriculture as well, are working with the group to create quality standards for Cosmic Crisp. One of the industry standards includes the branding of Cosmic Crisp. "Right now, 38.5 percent of products within the produce department are branded," Grandy explained, "and that's a huge growing trend, but the disconnect is that 55 percent of shoppers go into the store without a specific brand in mind." There's a lot of competition for the "shelf space" in shopping markets with all the new apple varieties, she stated, adding that will the competitive knowledge, the marketing committee decided to proceed with a standard brand across all companies. After completing consumer focus groups and sensory testing, the Cosmic Crisp name and logo were developed. "It's the first apple brand ever developed by consumers," Grandy expressed, "and the industry took that and

and consumer demand very quickly for Cosmic Crisp, as well as work with the sales and marketing companies in the state of Washington to create trade and retail programs." Represented by nearly 95 percent of the apple industry in the state of Washington, the marketing advisory group meets quarterly to discuss items such as marketing, growing and quality standards for the Cosmic Crisp. Within the marketing committee is a subcommittee specifically for focusing on quality standards, explained Grandy. "The industry has made the decision to manage the variety as an industry," she said, and the growers, with the assistance of Washington State Department of Agriculture as well, are working with the group to create quality standards for Cosmic Crisp. One of the industry standards includes the branding of Cosmic Crisp. "Right now, 38.5 percent of products within the produce department are branded," Grandy explained, "and that's a huge growing trend, but the disconnect is that 55 percent of shoppers go into the store without a specific brand in mind." There's a lot of competition for the "shelf space" in shopping markets with all the new apple varieties, she stated, adding that will the competitive knowledge, the marketing committee decided to proceed with a standard brand across all companies. After completing consumer focus groups and sensory testing, the Cosmic Crisp name and logo were developed. "It's the first apple brand ever developed by consumers," Grandy expressed, "and the industry took that and

and consumer demand very quickly for Cosmic Crisp, as well as work with the sales and marketing companies in the state of Washington to create trade and retail programs." Represented by nearly 95 percent of the apple industry in the state of Washington, the marketing advisory group meets quarterly to discuss items such as marketing, growing and quality standards for the Cosmic Crisp. Within the marketing committee is a subcommittee specifically for focusing on quality standards, explained Grandy. "The industry has made the decision to manage the variety as an industry," she said, and the growers, with the assistance of Washington State Department of Agriculture as well, are working with the group to create quality standards for Cosmic Crisp. One of the industry standards includes the branding of Cosmic Crisp. "Right now, 38.5 percent of products within the produce department are branded," Grandy explained, "and that's a huge growing trend, but the disconnect is that 55 percent of shoppers go into the store without a specific brand in mind." There's a lot of competition for the "shelf space" in shopping markets with all the new apple varieties, she stated, adding that will the competitive knowledge, the marketing committee decided to proceed with a standard brand across all companies. After completing consumer focus groups and sensory testing, the Cosmic Crisp name and logo were developed. "It's the first apple brand ever developed by consumers," Grandy expressed, "and the industry took that and

"It's the first apple brand ever developed by consumers."

Kathryn Grandy, Director of Marketing and Operations, Proprietary Variety Management



Photos courtesy of Kevin Brandt, Proprietary Variety Management

The Idyia Database will be able to provide marketing desks with information related to planting locations and industry wide box sales and projections.

said we're going to have a custom price look up (PLU) codes, packaging and we're going to be uniform across all sales companies, so there's a tremendous collaboration." The PLU has been submitted, but the marketing advisory group has asked for an exception, she explained. Typically, international standards do not give PLUs unless this apple has been at retail, however the Cosmic Crisp will not be at retail until fall of 2019. "So, with the support and letters of Wal-Mart, Costco, Albertson's and Safeway," she stated, "which is also unprecedented to have that kind of support, we're very hopeful to get the PLU within the next few weeks."

The apple has been a tremendous success with PR, said Grandy. After a broadcast on national radio, the day the broadcast came out the Cosmic Crisp website "went crazy," she stated excitedly, with around 3,500 hits "which was a lot for us." There have since been articles in grower magazines such as Good Fruit Grower and American Fruit Grower, and even on the cover of the Seattle Business Journal. "That article (in the Seattle Business Journal) was very favorable to Washington State and really seen all over the country," she said. The apple is, in fact, getting very high-level PR with cooperation from influential icons in media such as the Produce Mom, "who is the industry advocate for marketing and promoting produce ... (and) has national relationships with retailers such as Kroger and Wal-Mart," Grandy supplied. After a trip to New York, the apple has also earned the interest of Martha Stuart, Chef Emeril, various digital agencies and consumer magazines including 'Good Housekeeping', which has the nutritional seal of approval

and has already committed to publishing a teaser article this fall and a major article the fall of 2019, when the Cosmic Crisp is set to go to retailers. "We're working very hard not only to contract good media," Grandy explained, "but also get earned media that we don't have to pay for ... there is a lot of consumer excitement out there now and the retailers feel like it's an exceptional apple and they can't wait to get it in their hands." For more information on Cosmic Crisp, visit the website at www.cosmiccrisp.com. If you're interested in purchasing the WA 38 Cosmic Crisp trees or for inquiries, email NNII at nwnurseryii@gmail.com or visit the website at www.nniifruittrees.org.

and has already committed to publishing a teaser article this fall and a major article the fall of 2019, when the Cosmic Crisp is set to go to retailers. "We're working very hard not only to contract good media," Grandy explained, "but also get earned media that we don't have to pay for ... there is a lot of consumer excitement out there now and the retailers feel like it's an exceptional apple and they can't wait to get it in their hands." For more information on Cosmic Crisp, visit the website at www.cosmiccrisp.com. If you're interested in purchasing the WA 38 Cosmic Crisp trees or for inquiries, email NNII at nwnurseryii@gmail.com or visit the website at www.nniifruittrees.org.

For more information on Cosmic Crisp, visit the website at www.cosmiccrisp.com. If you're interested in purchasing the WA 38 Cosmic Crisp trees or for inquiries, email NNII at nwnurseryii@gmail.com or visit the website at www.nniifruittrees.org.

Training, growth, characteristics of Cosmic Crisp Apple discussed
See Page B5



DEDICATED LOCAL BANKER WITH TWO DECADES OF AG EXPERIENCE
A STRONG LOCAL COMMUNITY BANK WITH DEEP ROOTS IN AGRICULTURE

JUST A COUPLE OF THE ADVANTAGES YOU'LL HAVE WHEN YOU CHOOSE WHEATLAND BANK

Has your bank sold, merged or changed bankers on you? Will your bank be here tomorrow? Wheatland Bank will be, and is committed to remaining independent, which means we will be here to serve you, your family and your farming operation for many years to come.

Make the switch to Wheatland. Call Erik Hopkins today.



Chelan Branch
134 E. Woodin Ave.

509.682.1400
wheatlandbank.com

Equal Housing Lender

Nurseries participating in the growing and selling of the WA38 cv. Trees are:

- Biringer Nursery www.biringer-nursery.com
- Brandt's Fruit Trees www.brandtsfruitytrees.com
- C&O Nursery www.c-onursery.com
- Cameron Nursery www.cameronnursery.com
- Gold Crown Nursery 509-664-2973
- Helios Nursery 509-888-7244
- Mike & Brian's Nursery www.mikeandbriansnursery.com
- ProTree Nursery www.protreenuresery.com
- Tree Connection www.treeconnect.com
- Van Well Nursery www.vanwell.net
- Willow Drive Nursery www.willowdrive.com

A Revolution.

TGF 9900
Super-Low Profile Tractor
STARTING AT \$42,995
• 4WD • 75 HP

Available at
Washington TRACTOR

www.washingtontractor.com

Woolly Apple Aphid: The presence, the damage, the earwig

BY ERIN ROSSELL,
STAFF WRITER

CHELAN – The woolly apple aphid is an apple tree pest that is most commonly found feeding at the base of leaf axels, tree trunks and branches, explained Robert Orpet, with WSU Entomology during his presentation. The woolly apple aphids can essentially be found wherever there is a type of wound or cut on the tree, at the base of trees feeding on roots, and most importantly they're found underground feeding on the roots, "and that's the major problem," he emphasized. The aphid exists both above ground and below ground, year-round. "What you have is females that are reproducing by giving birth to clones of themselves," he explained. They have also been seen in a winged form, but the wings are not necessarily important for dispersal, Orpet said, "because the offspring of the winged aphid normally can only survive on elm trees." The woolly apple aphid is believed to spread mostly by crawling and by human mediated transport, such as moving tools. "I've seen large amounts of winged aphid," explained Orpet, "but if you take a close look, they're woolly, but they're not the woolly apple aphid. When I look at them they're also the smoky-winged ash aphid, which is not a pest, they're migrating to ash trees."

Wherever they feed, either above ground or below ground, they induce the formation of root galls. These galls interrupt nutrient and water distribution throughout the tree, explained Orpet, which can greatly reduce the growth of the tree. "Because these are an indirect pest, not feeding on fruit, it's very difficult to measure damage," he said, "that's why there are no established economic thresholds for this pest, but the scientific evidence that is available suggests that root feeding is a more important type of damage they cause."

By utilizing a resistant root stock, you can minimize, if not eliminate, the woolly apple aphid presence on your roots. Some of the new Geneva series rootstocks are resistant to the aphid,

supplied Orpet, so you'd likely have no or very few aphids on the roots. The question has to whether or not a resistant root stock would decrease the amount of the woolly apple aphid above ground was the basis of an experiment Orpet performed. To test the theory, he used six, 12-tree sections that he used sticky bands on, which were made of a substance called tanglefoot and known for its stickiness. He compared this section's results to another six, 12-tree sections that didn't have the sticky bands. Each week, the number of aphids from the west side of all the trees were counted, as well as the number of aphids present below the sticky bands, where Orpet had also placed a layer of double-sided sticky tape. "So, when the aphids come up, some of them get trapped on that tape," he explained on his process, "I can collect the tapes and count the number of aphids in the laboratory." The results showed that blocking the woolly apple aphid movement up had "no effect on aerial population dynamics," he concluded, adding, "there were actually even more aphids in the sticky band tree sections, and this was despite the thousands of aphids that were trapped on the tape." Orpet's conclusion was that resistant root stocks are highly important because they prevent aphid population on the roots, however, eliminating the population at the roots showed no effect on the above ground populations. The aphids can overwinter above ground, he explained, and survive in the summer, returning without any apparent influence from the roots. During Orpet's experiments in 2014 and 2015, he also discovered that in testing with both Gala and Fuji apples, the Fuji apple tended to have more of the woolly apple aphids.

Chemical control options may help with above ground populations, Orpet suggests that "these will do nothing for below-ground populations, for that you need a systemic insecticide," he explained. The important thing about insecticides is that you need to apply it early so that the leaves absorb it, he emphasized. Trying this method in an outbreak of



Photos courtesy of Robert Orpet, WSU Entomology

A large woolly apple aphid colony on a fruit tree branch
BELOW: Earwig shown nestled in an apple stem split

the aphids however, will not be effective. "The main goal (in chemical control) is to not disrupt natural enemy populations," he stated.

The studies conducted by Orpet in 2014 and 2015 looked at both conventional and organic orchards, and despite the lack of presence of chemical tools in the organic orchards to manage the aphids, they didn't show to be any more of a problem in organic orchards than in conventional orchards. "Perhaps because biological control is very important in attacking these aphids," suggested Orpet. Different things can be attacking the aphids, he said, such as lady bugs, lace wings and beetles, but he wanted to focus on the European earwigs, which are commonly found within apple orchards, as a biocontrol agent. "Studies suggest it's a key predator and also earwigs in general can feed on many other pests," he stated, "so, perhaps they're an underappreciated beneficial insect."

There has been a lot of concern from growers on the perceived negative effects that earwig populations have on fruit. Orpet, however, voiced that he feels the earwig isn't appreciated enough. This prompted another experiment. One focusing on the earwig as a biocontrol agent on the apple woolly aphids, and if the presence



or absence of earwigs showed any changes in the amount of damages to apples. "I wanted to critically test for both the positive and negative effects, experimentally," he explained. Orpet divided up an orchard into sections, removing earwigs in some sections while adding earwigs to another and leaving the remaining section completely untouched. Discovery of the earwigs is easy to do using rolled pieces of corrugated cardboard, he stated, because of the preference for tight

spaces. Once they move into the corrugations, he is then easily able to shake them out and count them. Each section was 30 meters apart, the distance based on studies showing that earwigs don't generally move more than 30 meters within a month's period. "I was successful in having different earwig levels in each section," he explained on his results, "and more earwigs resulted in fewer woolly apple aphids." In the high earwig sections, with five or more earwigs

per tree, Orpet stated that there was a very low level of aphids, and never more than one colony per tree. In the low earwig situations, the average number of colonies discovered on a tree was six, "some trees would have no colonies while others would have a lot more than six," he stated. Feeling that his experiment successfully showed the effectiveness of earwigs suppressing the woolly apple aphids, he then looked at approximately 12,000 apples from the same sites and categorized them. The inspection of the apples showed that it was just as likely to find good apples in the high earwig populated section as it was in the earwig removal areas. "Side tracks were equally likely, as well as limb rubs and small and large holes," said Orpet, "but I want to discuss stem hole splitting, which is very common especially on Gala apples when they're ripe or over ripe." At times, these splits seem to be expanded or rounded off, and were more likely in the earwig augmentation areas, he explained, but they were still very uncommon with only 17 out of 6,000 apples. "But if you consider those as a type a split and you group those out together," he suggested, "the occurrence of any type of split was equal between both styles." He then suggested that perhaps earwigs are not causing the splits, but rather attacking them where they've already occurred, as they attempt to nestle in the tight space. They're exploiting the damage but not causing or creating, he said, "so, I call that a horticulture issue, not an entomology issue ... I would suggest thinking about including earwigs in your integrated management plans for the woolly apple aphid," he suggested before concluding his presentation, "(but) keep in mind, the earwig only has one generation per year, so if they're eliminated for any reason their population could be really slow to recover."

Contact Robert Orpet with any inquiries by email at robert.orpet@wsu.edu or look for his videos from his experiments on youtube <https://www.youtube.com/watch?v=sSFakIgfMI>.

WSU Libraries to host national agriculture information conference

SUBMITTED BY WASHINGTON STATE UNIVERSITY

PULLMAN – Washington State University Libraries will host the 16th U.S. Agricultural Information Network Biennial Conference May 13-16 in Pullman — the first time members will convene in Washington state.

"This conference has never been hosted west of Arizona, so it's a big opportunity for WSU to

showcase Washington state agriculture," said WSU agriculture librarian and conference chairwoman Lara Cummings. "Approximately 100 agriculture and science librarians from around the nation will attend."

U.S. Agricultural Information Network provides a forum for information professionals to:

- Discuss food and agricultural issues.
- Influence the formation

of a national information policy related to food and agriculture.

• Make recommendations to the National Agricultural Library (NAL) on agricultural information matters.

• Promote cooperation and communication among its members and with other organizations and individuals.

Keynote speaker for the conference will be Carolyn Ross, associate professor

and director of WSU's Food Science Sensory Laboratory. One of WSU's top food scientists, Ross has studied waste streams in food production and worked to look at the influence of long-term ozone exposure on the nutritional and sensory properties of different crops. She has conducted sensory studies on the biodynamics and organics of fruits and vegetables through her lab.

NAL director Paul Wester also will speak at the

conference. Prior to heading NAL, Wester worked for the National Archives and Records Administration and was the U.S. government's first chief records officer. The NAL is one of four national libraries and houses one of the world's largest collections devoted to agriculture and its related sciences.

For more information about the 2018 conference, visit: <http://libguides.libraries.wsu.edu/usain2018>.



Carolyn Ross, associate professor and director of WSU's Food Science Sensory Laboratory



SPRAY SEASON PPE

Personal Protective Equipment
"Comfort & Protection"

Products & Solutions for Agricultural Safety

1-800-536-9272 www.oxarc.com 1-800-765-9055
Washington - Idaho - Oregon - Shop Online

- Chemical Gloves
- Full & Half Face Respirators
- Respirator Fit-Testing
- Chemical Splash Goggles
- Chemical Resistant Boots
- Chemical Protective Suits
- Disposable & Reusable suits available.

Add a Cooling-Vest
on hot days as a heat
stress precaution.



291 Ohme Garden Rd.
Wenatchee, WA 98801

Ag Spray Suits

Safety First:
Follow chemical manufacturer's guidelines for decontaminating the spray suit.
Do not use suit if there are cuts, holes, tears, missing snaps, or separated seams.



Over **100** Years of Dedication
to Quality and Excellence Since **1913**

BLUE BIRD



Pears

Traditional Facility
Peshastin 548-1700

Dedicated Organic Facility
Wenatchee 662-5191

Research continues potential controls for Spotted Wing Drosophila

By MIKE MALTAIS,
STAFF WRITER

CHELAN – Like the brown marmorated stink bug (BMSB), the Spotted Wing Drosophila (SWD), is an invasive fly species first discovered in Eastern Washington State in 2010.

Molly Darr, an WSU entomologist spoke about SWC control measures at the 2018 Lake Chelan Horticulture Day last January.

“Trapping is essential, so we can determine exactly what is going on in that specific year,” said Darr of SWD populations. “We can do O.K. with pest control for now, but we have begun to see some incidence of resistance popping up, so we want to move more toward varied IPM (Integrated Pest Management) strategies.”

Darr outlined population variances of SWD numbers from 2015 to 2017, with 2015 reflecting the highest number and traps counts in 2017 significantly lower. The variance was confirmed with help from the Washington State Department of Agriculture packing house inspections.

Darr said the variable in SWD density offers and

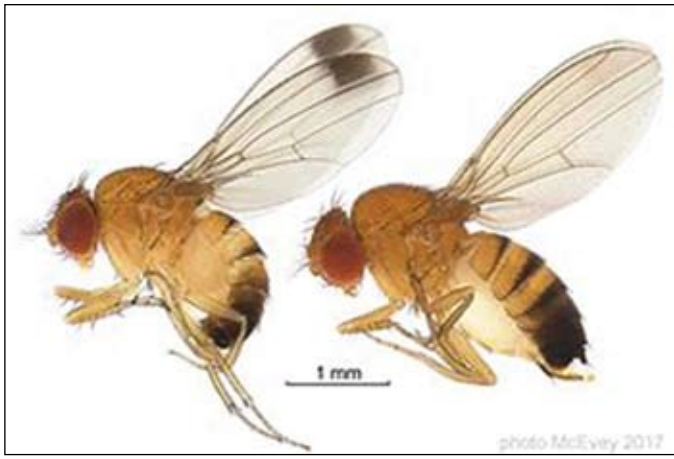


Photo courtesy of en.wikipedia.org

Spotted Wing Drosophila

opportunity to change control strategies.

Darr explained how the attracticide GF-120, which is a combination of attractant and toxicant, did not prove to be a good stand-alone treatment for SWD because there was still evidence of damage in the field after its use.

We tried some other attractants,” said Darr, “and combined all them with Entrust so we could use that as a control variable and we could see the effects of the attracticide itself. We then compared that result standard with a full year canopy spray

of Entrust.”

While GF-120 showed results almost as effective as the full year spray of Entrust “the other attractants we used were not quite as good, so we need to continue with the studies to see if we can get any positive results,” Darr said.

Darr said products coming onto the market to treat SWD are being tested for the control efficacy and to expand the choice of effective suppression remedies. Those include Dimlin, Rimon, and Ecotrol and liquid baits like Dros’Attract and Suzukii Trap.

“We may not be able to kill

the female,” said Darr, “but if we can prevent her from ovipositing then we’ve really done the work that we need to do.”

Darr reviewed some of the products currently being tested to address ovipositing females. “We need to think about multiple control tactics instead of just a single treatment.”

Methyl benzoate, discovered recently by USDA researchers was another deterrent tried. Combined with Ecotrol, methyl benzoate was found to result in significantly lower oviposition.

Selective lures designed to attract SWD but proved to be very effective in luring all other species of Drosophila.

The average amount of Spotted Wings caught per trap was three,” said Darr noting that more than 5,000 other Drosophila were also trapped. “So, you have to go through this pile of flies that are all the same size, shape, color – except for the spots on the wings – and it’s difficult to sort through the flies in the field when this is what you’re looking at.” Darr said.

Darr’s associate, Elizabeth Beers, WSU Professor of Entomology, posted research results on such aspects



Photo by Mike Maltais

Molly Darr

of SWD life cycles as lure efficacy, chemical control, and oviposition deterrence.

Significant finds following two years of research reveal:

- Ecotrol and methyl benzoate deterred SWD females from ovipositing in fruit.

- Dimlin and Rimon residues completely shut down fly emergence.

- Entrust gave high levels of mortality for 21 days.

- Two liquid baits Dros’Attract and Suzukii Trap are more selective for SWD but capture fewer flies.

Training, growth, characteristics of Cosmic Crisp discussed

By ERIN ROSSELL,
STAFF WRITER

CHELAN – Concluding the day’s presentations on the WA 38 ‘Cosmic Crisp’ was a characteristic and horticultural update on the apple given by Stefano Musacchi with WSU Horticulture.

The Cosmic Crisp tree is a type four tree, like that of the Granny Smith, Musacchi explained. The tree tends to have long branches with blind wood production near the trunk of the tree, and “is a reasonably vigorous variety which can be managed with cropping.” During bloom, the tree produces a lot of secondary lateral bloom, which can be up to 40 percent of the total cluster. A lateral blossom, as explained in Musacchi’s Characteristics and Horticulture handout, “forms along the developing shoot at the base of the leaf blade.” The bloom period for this apple is mid to late season, he explained.

The Cosmic Crisp “is a very exceptional variety,” expressed Musacchi, “and it is a very large fruit ... and the color is more of a bi-color variety than it is more of a red variety.” The training system the grower chooses to use will affect the amount of light that the apple receives, which in turn will affect the coloring of the fruit, as it requires uniform light exposure to develop a good coloring. “Low light locations in the canopy will produce a poorly colored fruit,” he explained, “it is important to match the tree training, pruning and thinning techniques as well as pollinizers to the tree habit.”

The Cosmic Crisp will perform well at any elevations in Eastern Washington if the right rootstock is used, and its bloom period and harvest period are suitable for both early and late districts.

Bi-Axis, Spindle and European V training types were tested for the Cosmic Crisp. The Bi-Axis system is based on two axes (leaders), which can result from the heading back of the tree in the field or budding two buds on the nursery rootstock. The trial on the Bi-Axis system occurred after initially heading back the tree to a 1.5-foot-high trunk immediately after planting, explained

The Cosmic Crisp “is a very exceptional variety, and it is a very large fruit ... and the color is more of a bi-color variety than it is more of a red variety.”

Stefano Musacchi with WSU Horticulture

Musacchi. After the emergence of shoots, the stem was headed back once again, at about one foot, “removing the strong vertical shoot and leaving two shoots in the lower portion of the trunk that generally exhibited a more open crotch angle,” he stated, “in both cases the two axes are grown as small, independent spindle trees.” Having two axes generally reduces vigor in comparison to a single spindle. The Bi-Axis system tends to have a high early yield and light exposure and doubles the axes/fruitlets units without doubling the cost. The Cosmic Crisp performs well in the Bi-Axis system, explained

Musacchi, and results in a good fruit coloring for the apple. Trunk spacing for the Bi-Axis WA 38 would be 4 X 10 foot to 4 X 11-foot spacing.

The Spindle system “is designed to maximize profitability through early yield, improve fruit quality, reduced spraying, pruning and training,” Musacchi began.

The trees are planted at “high density on dwarfing rootstock,” he explained, but no permanent limbs are inside the canopy, rather renewal cuts are made, removing limbs to large in diameter for the canopy. Spindle spacing for the Cosmic Crisp should be 3 x 8 foot to 3 x 12 foot. “On a thin spindle ... 60 to 90 percent of fruit with good color has been harvested.

Lastly, the European V system. This system “consists of staggered spindle trees grown at 10 to 15-degree angles,” Musacchi explained. In trials, the Cosmic Crisp was planted at 1.5 feet X 10-11 feet. This system, however, was the least favorable for the apple, resulting in shade in the lower areas due to the canopy, and difficulty pruning and cropping inside the ‘V’. Because of this, the Bi-Axis or spindle systems are recommended over the European V system.

Due to the Cosmic Crisp susceptibility to blind wood,

Musacchi recommended does not recommend this training method for Cosmic Crisp. The Cosmic Crisp apple boasts exceptional storage capability and retains its crispness and flavor. The apple is described as “red, symmetrical with red-striped blush (55 to 80 percent), attractive with prominent lenticels and a medium to large size,” explained Musacchi. Typically, 80 to 90 percent of the fruit fits into four different class sizes due to its narrow size profile and is not sensitive to bruising.

Typical storage time to maintain freshness is six or more months in refrigerated air storage, however, in a controlled atmosphere can keep its appearance and taste up to 12 months, without any of the storage disorders found in other apples such as water core, internal browning, sensitivity to carbon dioxide or low oxygen, superficial scald, chilling injury or shrivel. The occurrence of stem bowl splits is low (below five percent), but “can rise drastically if harvested too late,” he expressed.



**BRINGING
75 YEARS
OF EXPERIENCE
TO WENATCHEE'S
FARMERS**



**(888) 819-5045
WWW.BURROWSTRACTOR.COM**

© 2016 CNH INDUSTRIAL CAPITAL AMERICA LLC ALL RIGHTS RESERVED CNH INDUSTRIAL CAPITAL AND NEW HOLLAND ARE TRADEMARKS IN THE UNITED STATES AND MANY OTHER COUNTRIES, OWNED BY OR LICENSED TO CNH INDUSTRIAL N.V. ITS SUBSIDIARIES OR AFFILIATES

Serving Fruit Growers since 1921



Serving the Quad City/Lake Chelan Area Fruit Growers with innovative ideas to grow smart & increase productivity.

409 N 7th Street • Brewster
1680 Wilmoth Drive • Chelan
www.wilburellis.com

509-689-3113 509-682-5315

The BMSB is coming

Stink bug study sheds light on movements, numbers and controls

By Mike Maltais, Staff Writer

CHELAN – It turns out that a stink bug is an interesting creature to more than just another stink bug.

Take stink bugs in orchards, for instance. When it comes to their attraction and populations in fruit trees, stink bugs get attention from Adrian Marshall, an Entomology Ph.D. student at the Tree Fruit Research and Extension Center at Washington State University.

Marshall devised some ingenious experiments to help determine how, when, and in what numbers stink bugs invade orchards. In one case, he constructed barriers six feet wide and nine feet high with sticky traps every foot and one on the ground.

The idea was to catch the stink bugs as they were flying in to determine how high they travel. The results were interesting. Almost no stink bugs were trapped at ground level. The majority were caught between two and eight feet off the ground.

That tells us that we don't need a barrier that sticks all the way into the ground," said Marshall. "You can pretty much start at a foot high though



we don't know the maximum height yet so we're going to test that in future years."

He also added a flap to the barrier wall and discovered that stinks crawling up the wall will not progress past that flap.

Marshall found that stink bug numbers fluctuate at different times of the season, some helpful information for orchardists trying to determine when to apply control measures.

"Even in early June we have a huge spike in stink bugs that seem to be moving into the orchard," said Marshall. "Then another one around mid-July and another one around August and another one around September."

Stink bugs also migrate out of orchards several times a year, "so a single timed spray won't be effective against them," Marshall said.

Several other configurations of barriers and complete enclosures were used to not only measure the effective of artificial barriers but also see what effect they had on the natural predation cycle.

Marshall will conduct future tests to refine and reveal more details about effective measure against stink bugs. In the meantime, his initial studies have produced some helpful insights on the bugs' behavior:

Stink bugs move into orchards as early as June, so growers are advised to begin control measures earlier rather than later, but only when adult bugs are present.

The folds or flaps added to in the large barriers trapped stink bugs from climbing over the barrier and into the orchard. Future tests might show that the fold feature might actually stop the bugs from moving in.

Stink bugs have a number of natural predators including the lacewings, tachinid fly, praying mantis, and assassin bug, among others that attack the pest in the egg, nymph and adult stages.

Marshall had some practical spraying advice for orchardists trying to control stink bugs. He recommended that spraying be delayed until actual adult stink bugs are found. The infestations change from year to year depending on the amount of heat, said Marshall. To find adults he suggested orchardists inspect nearby vegetation such as mullein,



Photos courtesy of Adrian Marshall
Full enclosure barriers like this one helped Marshall study the stink bug controls both inside and outside the barrier. LEFT: A stink bug clings to a barrier wall.

elderberry bush or other plants that have fruiting bodies and stink bugs will be found.

"Wait until they are adults," said Marshall, "If you're finding nymphs out there, they are not causing damage in your orchard."

Marshall also reminded growers that if there are no apples on the tree yet there is no need to spray because the stink bug only attacks the apple.

Marshall also addressed a new larger invasive threat, the brown marmorated stink bug (BMSB), that was first found in Washington in 2012 in the Vancouver area. Since that time the pest has spread along the major highways and Columbia River. The five counties with BMSB include Clark, Yakima, Walla Walla, King and S. Chelan around Wenatchee and Leavenworth.

The BMSB is fast-moving and can fly 70 miles a day. It produces two generations a year rather than one that is typical of our native varieties.

"It affects a ton of source crops," said Marshall. "It can be found in more than a hundred different source plants, so it eats everything we eat."

Fruit crops at greatest risk include apples, pears, grapes and peaches/nectarines. At

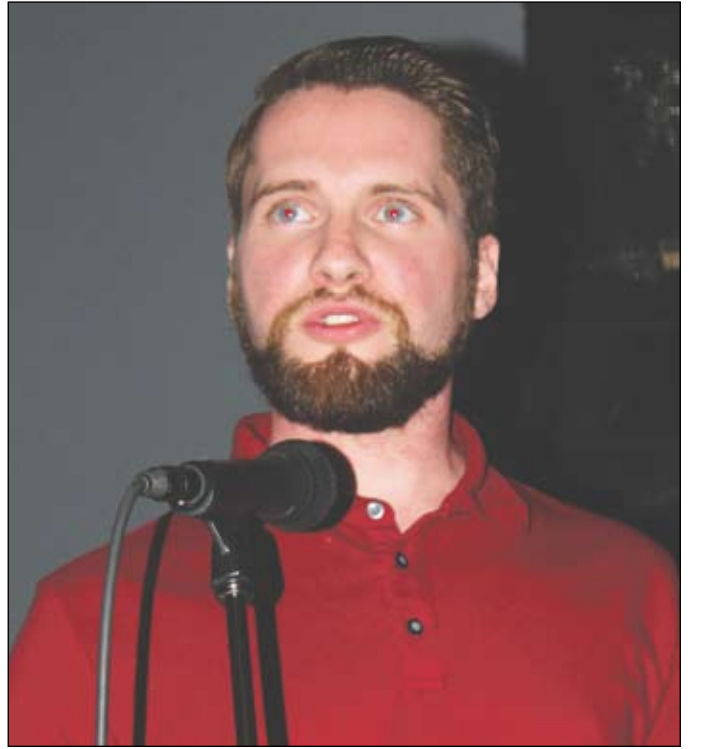


Photo by Mike Maltais
Adrian Marshall is a Ph.D. student of Entomology at the WSU Tree Fruit Research and Extension Center.

moderate risk are apricots, cherries and blueberries. Fruit varieties that are late blooming and remain on the tree longer are particularly vulnerable.

Marshall and his crew continue to work on control options for the BMSB, ranging from mechanical measures to biological

Marshall said that while the BMSB has not yet appeared in Chelan, he asked growers to be vigilant for the presence of the invader and report any findings.

Late blooming and on the tree longer meaning it's the only remaining food source later in the season.

washington orchard & residential brokers

We have qualified buyers for your

- Orchard • Vineyard
- Recreation Property

We are locally owned and have served Eastern Washington for over 42 years

Call our Brokers for FREE Market Update!!

Office 509.663.3333
Kevin 509.669.0407 • Bo 509.389.1223
Dennis 509.669.4500

Member NW Multiple Listing Service

WESTERB984CF

WESTERN RANCH BUILDINGS
STEEL & POST FRAME BUILDING CONTRACTORS

NFBA **Garco** Building Systems

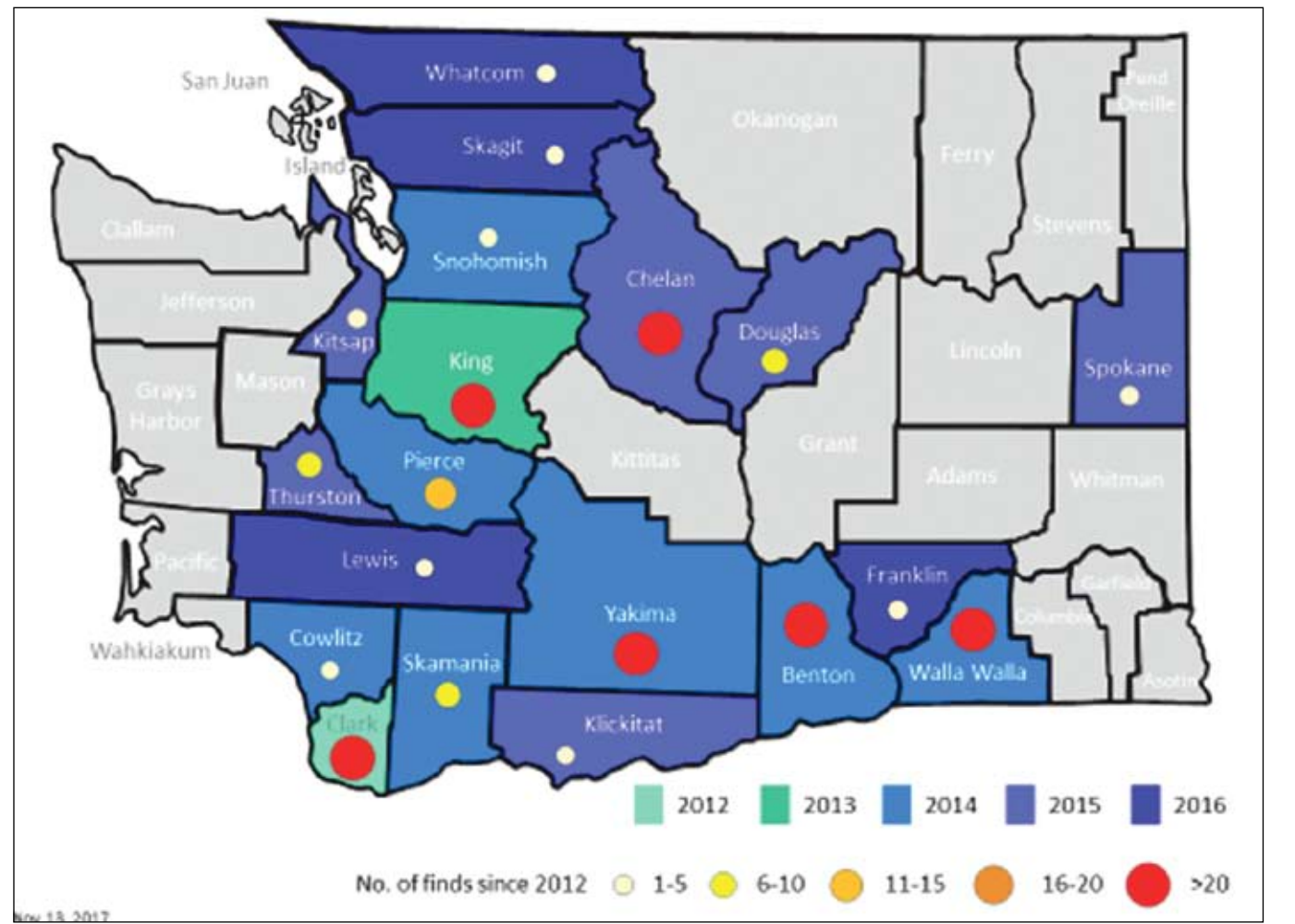
Your building can be customized just the way you want!

Sold and erected by an independent, locally owned builder

BUILDING SINCE 1976

(509) 884-0555 4968 Contractors Drive
www.westernbuildings.com East Wenatchee, WA 98802

RESIDENTIAL • COMMERCIAL • INDUSTRIAL • AGRICULTURAL



The Brown Marmorated stink bug (BMSB) have been found in at least five counties in Washington State (red dots).

We've got North Central Washington covered

With more than 27,000 dedicated readers, NCW Media keeps you informed and up to date on local and regional issues.

Visit us on the web **To subscribe call our Circulation Dept. at (509) 293-6780**

Publishers of

THE LEAVENWORTH ECHO leavenworthecho.com

QUAD CITY HERALD qcherald.com

LAKE CHELAN MIRROR lakechelanmirror.com

CASHMERE VALLEY RECORD cashmerevalleyrecord.com

WENATCHEE BUSINESS JOURNAL ncwbusiness.com

Proper spray application is a technique perfected by practice

By MIKE MALTAIS, STAFF WRITER

CHELAN – One statement by Gwen Hoheisel, WSU Regional Extension Specialist, sums up her dedication to an aspect of orchard horticulture: “I am extremely passionate about sprayers,” Hoheisel said and describes her job as “I evaluate, I educate, and I recreate.”

Hoheisel said her goal at the 72nd Lake Chelan Horticulture Day presentations was to show orchardists “how to match the air to the canopy and how to assess and control your air and to inspire you while there is still snow on the ground to think about this.”

Hoheisel’s rationale to get growers to give spray operations some early attention was logical.

“Come March, you’re running,” said Hoheisel, “and really none of you grow trees because you like sprayers.”

Hoheisel used slides taken from a sprayer research project done on an Omak orchard to demonstrate the way spray applications change according to the demands of different types and sizes of fruit and the trees on which they grow. She also shared some survey results from other growers and what parts of the spray process they wanted to improve.

Hoheisel stressed that despite their wide variety, there is no perfect machine; all can be operated perfectly or poorly and much of the difference has to do with a properly maintained machine. What makes a sprayer effective is the degree of upkeep on the machine and attention to details like tractor speed, air control and direction and outside wind speed.

Sprayer pressure gauges, hoses and filters need to be inspected and replaced regularly. Tire pressures need



Photo courtesy of Gwen Hoheisel, WSU Extension. Wind forms a boundary layer, like these leaves around a parked pickup, that can help growers understand how the same principle works when applying pesticide to fruit.



Gwen Hoheisel

to be checked to ensure that rate application controllers tied to correct tire pressure are working in synch.

Water pH should be tested and spray chemicals correctly mixed and properly loaded.

Hoheisel stressed optimizing air control to increase the amount of pesticide that hits the intended target and to reduce drift.

“Air flow controls where you place the drops,” said Hoheisel. “too much and you blow through and miss the target.”

In addition to the dollar cost of wasted pesticide, missing the target results in more culls and increased resistance to pest control. Hoheisel showed some research lab video clips to demonstrate how air responds to target size. She also explained how a boundary

layer that forms around an object is affected by the size of the fruit.

Hoheisel also discussed techniques to monitor air flow, direction and volume in an orchard setting. One technique utilizes ribbons tied to the fan guard to measure the force and speed of air flow. Ribbons blowing straight out can be an indication of too much force while ribbons not moving can indicate too little or no air flow.

Donuts and shrouds attached to the fan guard can help reduce and direct air to the desired target. Gearing up the tractor while throttling down can also reduce the fan speed to prevent over-flowing the target.

In summary Hoheisel said that there are easy and inexpensive ways to monitor and control air flow. One of those is to keep the equipment properly maintained so that all the components necessary to effective pesticide application are working as they should.

Tractor speed and air flow volume needs to be adjusted during the season to account for aerodynamics of boundary layers and canopy barriers.

“Air controls where we put – or don’t put – the droplets,” Hoheisel said.

Breaking down fiber: Nutritionists gives insight into the nation’s understanding of fiber

SUBMITTED BY PEAR BUREAU NORTHWEST

PORTLAND, OREGON

Fiber is considered an under-consumed nutrient and nutrient of public health concern according to the current Dietary Guidelines for Americans. While the nation’s need for increased fiber intake is well established, education is needed in order for people to better understand fiber and fiber needs. For an inside look into how registered dietitian nutritionists and the patients, clients and communities they counsel view fiber, Pear Bureau Northwest surveyed over one thousand dietitians from across the nation to tap into a cross-section of their experiences.

In sharing their experiences as they relate to fiber, dietitians revealed the following takeaways:

Education is needed on fiber

Most dietitians have a similar experience when it comes to talking about fiber with their patients. 50% or less of the individuals/communities they counsel seem to understand the benefits of fiber. Moreover, dietitians shared that 50% or less of the people they counsel understand how to include fiber in their daily diets, and the same amount, 50% or less, take action to include fiber into their daily diets.

Fruit takes the lead

In practice, dietitians recommend fruit more often than any other high-fiber food. When recommending ways to increase fiber, dietitians stick with whole foods, while fiber-enriched foods and fiber supplements are recommended least often.

When it Comes to Fiber, Pears Rank Higher

With 6g of fiber in one medium pear providing 24 percent of daily fiber needs,



With 6g of fiber in one medium pear providing 24 percent of daily fiber needs, pears are a top choice among dietitian recommendations to increase fiber intake.

pears are a top choice among dietitian recommendations to increase fiber intake, and it’s no surprise why. Pears are an excellent source of fiber and have vitamin C with only 100 calories per serving. Plus, pears are sodium free, fat-free and cholesterol free.

Preparation is Key

The most common roadblock dietitians have found to prevent people from getting enough fiber is a lack of knowledge among those they counsel about how to prepare high-fiber foods. Additionally, more than half of dietitians have encountered a dislike of high-fiber foods as a major barrier to proper fiber consumption among individuals/communities they counsel.

Pears are in season now and plentiful at grocers nationwide, making this the perfect time to enjoy the many varieties of pears. To help overcome the preparation barrier commonly encountered with high-fiber foods, try the following tips to enjoy pears and their nutrition benefits:

The best way to judge the ripeness of a pear is to Check the Neck™: Apply gentle pressure to the neck of the pear with your thumb. If it yields to pressure, it’s ripe.

Leave firm, unripe pears at room temperature so that they can ripen. Once a pear is ripe, it can be refrigerated to slow the ripening process and saved for use up to five days.

If you find yourself with a few too many overripe pears, blend them into smoothies, soups, sauces and purees.

Pear Bureau Northwest continues to pursue opportunities to better understand the health benefits of pears and their ability to contribute to a healthy diet. Visit www.usapears.org for additional pear research, nutrition resources and recipes.

About Pear Bureau Northwest

Pear Bureau Northwest was established in 1931 as a nonprofit marketing organization to promote the fresh pears grown in Washington and Oregon. As the nation’s largest pear-growing region, 900 grower families produce 88% of all fresh pears commercially grown in the United States. Pears grown in these two Pacific Northwest states are distributed under the “USA Pears” brand. Pears are an excellent source of fiber (24% DV) and a good source of vitamin C (10% DV) for only 100 calories per medium-sized pear. Sweet and juicy with no fat, no sodium and no cholesterol, pears are a perfect choice for snacking and make a great addition to any meal. For more information, visit www.usapears.org, www.facebook.com/USAPEARS, and follow @USAPEARS on

AmeriGas®

America’s Propane Company

RELIABLE, SAFE, RESPONSIVE

See us for all of your

• Residential • Agricultural • Warehouse
Propane needs!



• Trained Professionals
• 24-Hour
Emergency Service

• Prompt Installation
• Reliable Fuel Delivery



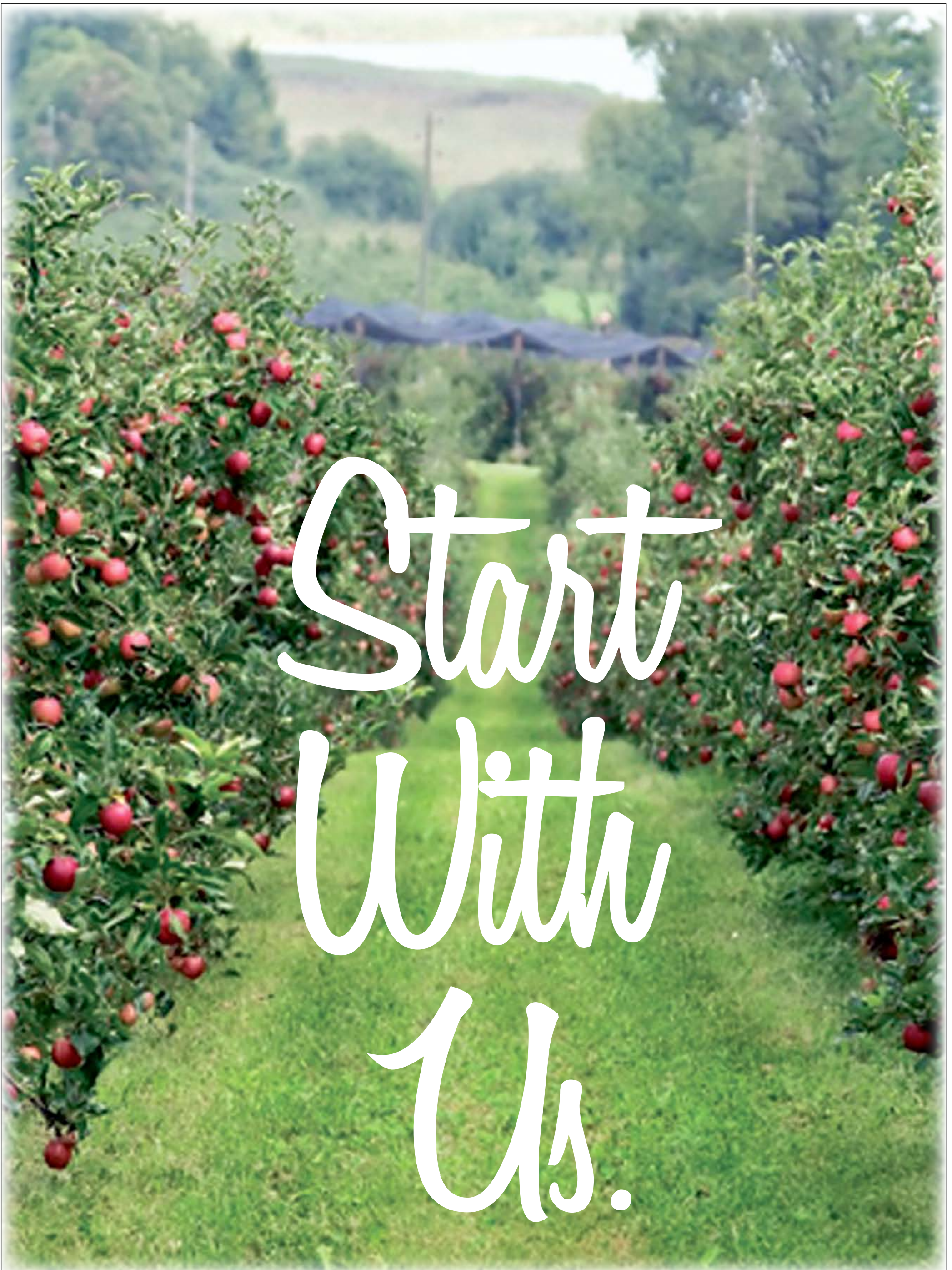
Serving all of North Central Washington!

4261 Hwy 97A
WENATCHEE, WA 98801
509-663-4101

3688 E. Broadway Ext.
MOSES LAKE, WA 98837
509-488-2312

903 Engh Road
OMAK, WA 98841
509-826-7989

www.amerigas.com



Start With Us.

CHELAN
FRESH



Contact us at www.chelanfresh.com
509-682-4252

Follow us on   