<u>OUTDOORS</u>

Seeing our star in a new light

At sunrise every day for 40 years, Steve Padilla arises on Mount Wilson, Calif., and goes to work at the observatory to draw sunspots. The solar telescopes were originally installed by astronomer George Hale early in the last century. Even after so many decades, modern technologies, and scopes on spacecraft orbiting Earth which can see more detail, the human eye is better at zeroing in on subtle features of each sunspot. Astronomers continue to maintain a consistent visual record.

Who really thinks about the sun? It shows up every day to illuminate our world. Maybe we grumble after too many cloudy days. And we brighten just like the sun, when it comes out after the rains have cleared, but we rather assume that Earth will continue to rotate and we will see daylight after night comes to an end. It seems obvious that the sun just does its job, but because we can't look directly at the brilliant orb with our naked eye, or at least we shouldn't, it becomes easy to take our closest stellar object for granted. Much can still be learned by focusing on the sun. So the University of California at Los Angeles maintains the steady art of recording the sunspots, which have been reviewed and studied since before Galileo.

sunspots (dark patches) appear regularly in the sun's gaseous outer shell over a series of days. The sun is somewhat like a cauldron of convection, not terribly different from a pot of water bubbling on a stove top. Water in a rolling boil cycles to the top, and turns



Outdoors

By Paul Zaenger

over as it rotates back to the bottom. Convection on the sun circulates in a similar manner.

Temperatures of the patches are usually cooler than the sun itself. A large sunspot could be 6,700 degrees Fahrenheit, compared to the average overall solar temperature of some 10,000° F. They appear darker primarily because they are not quite as bright as the overall "surface" or corona of the sun. And they can be huge... compared to Earth, expanding and contracting as they travel across the solar surface, their size can grow from some 10 miles across, to tens of thousands of miles.

Yet they give us some good clues to the powerful magnetic activity of the sun. Like Old Faithful at Yellowstone's upper geyser basin, the solar blemishes host coronal loops or prominences which erupt from the corona. Although prominences appear somewhat like flares, the loops are a different kind of incident. The number and strength of sunspots, along with prominences and flares, provide insight to astronomers on the amount of solar activity. Taken together, it is believed that they reflect the amount of energy released by the magnetic field of the sun.



Members of the Black Canyon Astronomical Society set up telescopes for the sixth annual Black Canyon Astronomy Festival. (Becky Wright/Daily Press)

Maybe it seems natural that sunspot and solar activity rise and fall in cycles, but stay with me. The energy is released as particles: electrons, protons (think high school chemistry) in larger and smaller amounts, depending on the cycle. Almost as if the breath of Apollo himself were sent our way, the solar wind blows the particles to Earth and beyond. While this is not entirely understood, the fluctuations impact our weather and communications, and maybe more importantly, they impact

with the aurora borealis. It's hard to picture our sun as a living entity, but watching an aurora unfold across the sky is almost as surreal an event as any in nature. If you've not seen it in person, check out one of the many videos on line. To experience an aurora is to feel as though the sun

northern night skies

If you go

Solar Viewing at Black Canyon Astronomy Festival:

- Today, 1:30 to 3 p.m., South Rim Visitor Center.
- •Saturday, 1:30 to 3p.m., South Rim Visitor Center.

Solar Viewing at Montrose Farmers Market with Black Canyon Astronomical Society:

- July 4, after 8:30 a.m.
- The astronomy society will also be at the market July 11 and 18, Aug. 1 and Sept. 5 and 12.

has arrived on our planet in living form. In fact, our sun does have a life of its own. Astronomers have found star nurseries in nebula formations such as the Eagle or Orion Nebulae. The sun was likely born from such a feature out in the Milky Way during a time difficult for us to image. And we know that our sun, like stars across the universe, will also pass away in time.

So Steve Padilla has drawn sunspots to help track solar activity for our time, even in this century. Reported on by Los Angeles media, his work has relevancy to science, and may contribute to a much bigger understanding of star behavior than we presently have.

We are also able to look into a solar scope (using special red "hydrogen alpha" filters) and gaze closely upon our sun through the assistance of the Black Canyon Astronomical Society. Planets, stars, black holes, globular clusters and more are all out in the night sky, and we come to understand that these features add to the

gation Tacti

magnificent universe.

Because the universe is so vast, it is easy to take this most important feature in the sky for granted. By looking closer at the sun we can come to see that it more than influences our lives. It is the one astronomical feature in which we truly have a constant relationship. Because it makes life work on Earth, our sun is as much a part of our natural world as all of the plant and animal life in our corner of western Colorado. And in that regard, it makes life possible for us as much as our relationships between family and friends.

Paul Zaenger has been a supervisory park ranger at Black Canyon of the Gunnison National Park since 1993. Other park assignments include Mount Rushmore National Memorial and Glen Canyon National Recreation Area.

Now's the time to prepare your home for wildfire

Tips

from the Posse

By Mark Rackay

On June 23, 2012, the Waldo Canyon fire began, just a few miles from Colorado Springs. When it was finally contained

it had consumed 18.247 acres and destroyed 346 homes. 32,000 residents were evacuated from their homes. Insurance claims exceeded 450 million dollars. Then, a year later, the Black Forest Fire destroyed 486 homes. This became the costliest fire in Colorado history.

Wildfires are probably the most common disaster we may face here in Western Colorado. Many are caused by lightning strikes but the sad truth is that most are caused by careless acts of people. While there is nothing you can do to control or prevent a wildfire from approaching your property, there are steps you can take to minimize potential damage. The time to

take these steps is long before a fire starts. Taking these steps will make your home more defensible for a fire.

rely on the firefighters to protect their homes.
Truth is, while
they will do their
very best, there
may be little they
can do. Fires the
size of Waldo
Canyon or Black
Forest will tax
all the resources available to
us. There is also
the possibility

Many people

that because of the nature of a particular fire, the firefighters might not be able to even get to your property. The first steps in defending your home and property are up to you.

One of the reasons we all live here in Montrose is the close proximity of the forestlands. These beautifully treed landscapes surround our community and spread in all directions

from town. As more people move into the area, we encroach unto these lands, building homes and subdivisions amongst these forests. The deeper into the woods we build our homes, the further away from assistance we become, and the more susceptible to destruction by fire we are. It's not a question of if we will have a wildfire, but when.

From roof down

Start by doing a study of your home and property. The little things can make all the

difference for the survivability of your property. Your roof is a great place to begin. It should be made of a nonflammable material. Metal roofs are good while wood shakes are not. Keep your roof and gutters clean and free from debris such as pine needles and dead leaves. Their presence can cause blowing embers to ignite your home. Beware of attachments to the house such as untreated wooden decks. These are very vulnerable and should also be kept cleaned underneath of all debris. During fire season remove large potential heat sources

next to foundation.

2. Screen in under burnable strutures like decks.

3. Trim all ladder fuels to a heigh

1. 3-5 Feet unburnable surface

Trim all ladder fuels to a height of 6'-10'.

4. Class "A" roofing includes, clay tile, metal, and asphalt.

5. Clean debris from gutters and rooflines.

 Enclose any places where firebrands can lodge or enter a structure.
 Interrupt "fuses" connecting your

Interrupt "fuses" connecting your home to the landscape.
 Clear any burnables from

Clear any burnables from around/above propane tanks.
 Chip or dispose of any slash or

dry fuels.

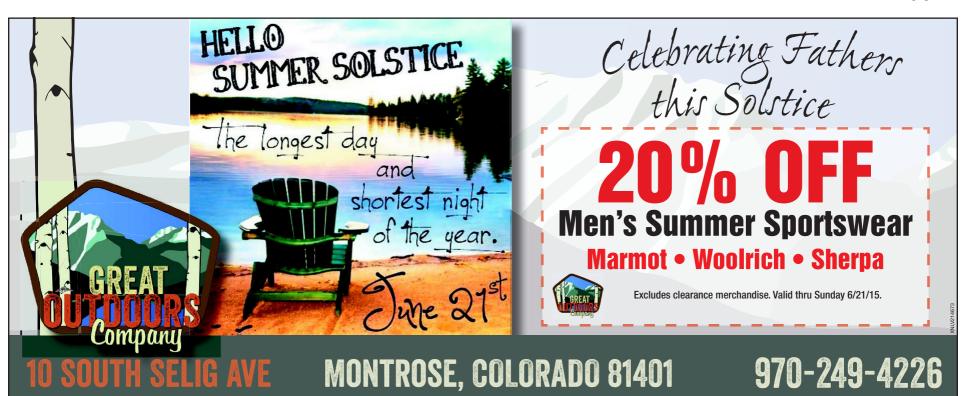
10. Gasoline should be inside or

far away.

such as piles of firewood, deck furniture, vehicles-anything that could catch embers or ignite by flames in the grass needs to be as faraway from the dwelling as possible. A propane tank is of special concern and should be located as far from the home as possible, keeping the area around it clear also.

It is a good idea to make a list of the contents of your home. The list can also have the serial numbers of the valuable items, if present. This can be helpful in the event you have to

See WILDFIRE, page A11



Sports/Outdoors

SCOREBOAR

Pro baseball American League

Times EDT

Eust Division							
	W	L	Pct	GB			
Tampa Bay	37	30	.552	_			
New York	35	30	.538	1			
Toronto	36	32	.529	1½			
Baltimore	34	32	.515	21/2			
Boston	28	39	.418	9			
Central Division							
	W	L	Pct	GB			
Kansas City	37	25	.597	_			
Minnesota	36	30	.545	3			
Detroit	34	32	.515	5			
Cleveland	30	34	.469	8			
Chicago	28	36	.438	10			
West Division							
	W	L	Pct	GB			
Houston	40	28	.588	_			
Texas	36	30	.545	3			
Los Angeles	34	33	.507	51/2			
Seattle	30	36	.455	9			
Oakland	29	40	.420	111/2			
Wednesday's Games							

Baltimore 6, Philadelphia 4 N.Y. Yankees 2, Miami 1
Tampa Bay 5, Washington 0
Toronto 8, N.Y. Mets 0
Atlanta 5, Boston 2 Chicago Cubs 17, Cleveland 0 Cincinnati 8, Detroit 4, 13 innings Kansas City 10, Milwaukee 2 Pittsburgh 3, Chicago White Sox 2 Minnesota 3, St. Louis 1 Houston 8, Colorado 4 Arizona 3, L.A. Angels 2 Oakland 16, San Diego 2 Seattle 2, San Francisco 0

Texas 5, L.A. Dodgers 3
Thursday's Games
Philadelphia 2, Baltimore 1 Minnesota 2, St. Louis 1 Houston 8, Colorado 4 Houston 8, Colorado 4
San Diego 3, Oakland 1
L.A. Angels 7, Arizona 1
Miami at N.Y. Yankees, late
Tampa Bay at Washington, late
Toronto 7, N.Y. Mets 1
Boston at Atlanta, late Chicago Cubs at Cleveland, late Detroit at Cincinnati, ppd., rain Milwaukee at Kansas City, late Pittsburgh at Chicago White Sox, late San Francisco at Seattle, late Texas at L.A. Dodgers, late

Friday's Games
Detroit (Verlander 0-0) at N.Y. Yankees (Warren 4-4), 7:05 p.m.

Baltimore (M.Wright 2-2) at Toronto (Estrada 4-3), 7:07 p.m.
Tampa Bay (Karns 3-3) at Cleveland (Carrasco 8-5), 7:10 p.m. Boston (E.Rodriguez 2-1) at Kansas City (Pino 0-1), 8:10 p.m. Chicago Cubs (Hendricks 2-2) at Minnesota (P.Hughes 4-6), 8:10 p.m. Texas (Lewis 6-3) at Chicago White Sox (Sale 6-3), 8:10 p.m. L.A. Angels (Shoemaker 4-5) at Oakland (Gray 8-3), 9:35 p.m. Houston (McCullers 3-1) at Seattle (Elias

3-4), 10:10 p.m.

Saturday's Games Baltimore at Toronto, 1:07 p.m. Chicago Cubs at Minnesota, 2:10 p.m. Texas at Chicago White Sox, 2:10 p.m. L.A. Angels at Oakland, 4:05 p.m. Boston at Kansas City, 7:10 p.m. Tampa Bay at Cleveland, 7:10 p.m. Detroit at N.Y. Yankees, 7:15 p.m. Houston at Seattle, 10:10 p.m.

American League leaders

Through June 18 (Night games not included)

BATTING: Fielder, Texas, .344; MiCabrera, Detroit, .342; Kipnis, Cleveland, .333; Moustakas, Kansas City, .323; NCruz, Seattle, .309; Pedroia, Boston, .307; Donaldson, Toronto, .305.

RUNS: Donaldson, Toronto, 54; Dozier, Minnesota, 52; Trout, Los Angeles, 49; Bautista, Toronto, 44; Kipnis, Cleveland, 44; Gardner, New York, 43; MMachado, Baltimore, 43.

RBI: MiCabrera, Detroit, 51; Teixeira, New York, 48; Fielder, Texas, 47; Vogt, Oakland, 47; Donaldson, Toronto, 45; KMorales, Kansas City, 42; Bautista, Toronto, 41; NCruz, Seattle, 41; Reddick Oakland 41

HITS: Fielder, Texas, 88; Kipnis, Cleveland, 85; Donaldson, Toronto, 81; Pedroia, Boston, 81; MiCabrera, Detroit, 80; Cespedes, Detroit, 76; NCruz, Seattle, 76.

DOUBLES: Dozier, Minnesota, 21; Brantley, Cleveland, 20; Cespedes, Detroit, 19; Kipnis, Cleveland, 19; KMorales, Kansas City, 18; Cano, Seattle, 17; SSmith, TRIPLES: RDavis. Detroit. 6: Kiermaier

Tampa Bay, 5; Orlando, Kansas City, 5; Burns, Oakland, 4; DeShields, Texas, 4; Eaton, Chicago, 4; Kipnis, Cleveland, 4. HOME RUNS: Pujols, Los Angeles, 19; NCruz, Seattle, 18; Teixeira, New York, 18; Trout, Los Angeles, 18; Donaldson Toronto, 17; Valbuena, Houston, 16; MiCa-

STOLEN BASES: Altuve, Houston, 17;

Gardner, New York, 15; RDavis, Detroit, 14; Ellsbury, New York, 14; Burns, Oakland, 13; DeShields, Texas, 13; Springer,

PITCHING: FHernandez, Seattle, 10-3; Keuchel, Houston, 8-2; Pineda, New York, 8-3; Gray, Oakland, 8-3; Carrasco, Cleveland, 8-5; Simon, Detroit, 7-3; Archer, Tampa Bay, 7-4; Buehrle, Toronto, 7-4; Richards, Los Angeles, 7-4.

ERA: Gray, Oakland, 1.60; Archer,

Tampa Bay, 2.00; Keuchel, Houston, 2.04; Odorizzi, Tampa Bay, 2.47; Price, Detroit, 2.50; Chavez, Oakland, 2.52; Simon, Detroit, 2.58.

STRIKEOUTS: Archer, Tampa Bay, 113; Kluber, Cleveland, 111; Sale, Chicago, 105; Gray, Oakland, 88; Price, Detroit, 88; FHernandez, Seattle, 87; Pineda, New York, 87; Salazar, Cleveland, 87. SAVES: Perkins, Minnesota, 23;

Street, Los Angeles, 20; Britton, Baltimore, 18; AMiller, New York, 17; Gregerson, Houston, 17; Soria, Detroit, 16; Boxberger, Tampa Bay, 15.

National League

,	Times	EDT				
East Division						
	W	L	Pct	GI		
New York	36	32	.529	_		
Washington	34	32	.515	1		
Atlanta	32	34	.485	3		
Miami	29	38	.433	61/		
Philadelphia	23	45	.338	10		
Central Division						
	W	L	Pct	GB		
St. Louis	43	23	.652	-		
Pittsburgh	38	27	.585	41/		
Chicago	35	28	.556	61/		
Cincinnati	30	35	.462	12!		
Milwaukee	24	43	.358	19		
West Division						
	W	L	Pct	GB		
Los Angeles	37	29	.561	_		
San Francisco	35	32	.522	21/		
Arizona	32	34	.485	- 5		
San Diego	33	36	.478	51/		
Colorado	28	. 38	.424	5		
		's Gan	nes			
Baltimore 6, Phi						
N.Y. Yankees 2,						
Tampa Bay 5, W		iton u				
Toronto 8, N.Y. I						
Atlanta 5, Bosto	n 2					

Chicago Cubs 17, Cleveland 0 Cincinnati 8, Detroit 4, 13 innings Kansas City 10, Milwaukee 2 Pittsburgh 3, Chicago White Sox 2 Minnesota 3, St. Louis 1 Houston 8, Colorado 4 Arizona 3, L.A. Angels 2

Oakland 16, San Diego 2 Seattle 2, San Francisco 0 Texas 5, L.A. Dodgers 3 Thursday's Games
Philadelphia 2, Baltimore 1 Minnesota 2, St. Louis 1 Houston 8, Colorado 4 San Diego 3, Oakland 1 L.A. Angels 7, Arizona 1 Miami at N.Y. Yankees, late Tampa Bay at Washington, late Toronto 7, N.Y. Mets 1 Boston at Atlanta, late

Chicago Cubs at Cleveland, late Detroit at Cincinnati, ppd., rain Milwaukee at Kansas City, late
Pittsburgh at Chicago White Sox,late San Francisco at Seattle, late Texas at L.A. Dodgers, late Friday's Games
Pittsburgh (Burnett 6-2) at Washington

(J.Ross 1-1), 7:05 p.m. St. Louis (Lyons 1-0) at Philadelphia (Aumont 0-0), 7:05 p.m. Miami (Haren 6-3) at Cincinnati (Leake 3-4), 7:10 p.m. N.Y. Mets (deGrom 7-4) at Atlanta (Wisler 0-0), 7:35 p.m. Chicago Cubs (Hendricks 2-2) at Minne-

sota (P.Hughes 4-6), 8:10 p.m. Milwaukee (Jungmann 1-1) at Colorado (J.De La Rosa 4-2), 8:40 p.m. San Diego (Shields 7-0) at Arizona (R.De La Rosa 5-3), 9:40 p.m. San Francisco (Heston 6-5) at L.A. Dodgers (Bolsinger 4-1), 10:10 p.m.

Saturday's Games

Chicago Cubs at Minnesota, 2:10 p.m. Pittsburgh at Washington, 4:05 p.m. Milwaukee at Colorado, 4:10 p.m. St. Louis at Philadelphia, 7:05 p.m. Miami at Cincinnati, 7:10 p.m. N.Y. Mets at Atlanta, 7:10 p.m. San Francisco at L.A. Dodgers, 7:15 p.m. San Diego at Arizona, 10:10 p.m.

Sunday's Games Miami at Cincinnati, 1:10 p.m. Pittsburgh at Washington, 1:35 p.m. St. Louis at Philadelphia, 1:35 p.m. Chicago Cubs at Minnesota, 2:10 p.m. Milwaukee at Colorado, 4:10 p.m. San Diego at Arizona, 4:10 p.m. N.Y. Mets at Atlanta, 5:05 p.m. San Francisco at L.A. Dodgers, 8:08 p.m.

National League leaders

Through June 18 (Night games not included) BATTING: Goldschmidt, Arizona, .357: DGordon, Miami, .352; Harper, Washington 344 LeMahieu Colorado 330 Aoki San Francisco, .317; YEscobar, Washington, .316; Panik, San Francisco, .311 RUNS: Goldschmidt, Arizona, 50; Harper, Washington, 49; Frazier, Cincinnati, 48; Fowler, Chicago, 44; FFreeman, Atlanta, 43; Pollock, Arizona, 43; Stanton, Miami,

RBI: Stanton, Miami, 62; Goldschmidt, Arizona, 54; Harper, Washington, 52; Arenado, Colorado, 51; Frazier, Cincinnati,

46; SMarte, Pittsburgh, 45; AGonzalez, Los Angeles, 43. HITS: DGordon, Miami, 96; Gold-schmidt, Arizona, 85; Aoki, San Francisco, 80; LeMahieu, Colorado, 77; Pollock, Arizona, 77; FFreeman, Atlanta, 76; Markakis,

Atlanta, 75; Panik, San Francisco, 75; Jh-Peralta, St. Louis, 75. **DOUBLES**: AGonzalez, Los Angeles, 22; MCarpenter, St. Louis, 20; Duda, New York, 20; FFreeman, Atlanta, 20; Rizzo, Chicago, 20; Frazier, Cincinnati, 19; DeNorris, San Diego, 18; Tulowitzki, Colorado,

TRIPLES: Revere, Philadelphia, 6; Ethier, Los Angeles, 4; Fowler, Chicago, 4; Grichuk, St. Louis, 4; Realmuto, Miami, 4;

HOME RUNS: Stanton, Miami, 24; Frazier, Cincinnati, 22; Harper, Washington, 22; Goldschmidt, Arizona, 19; Pederson, Los Angeles, 17; Arenado, Colorado, 16; Votto, Cincinnati 14

STOLEN BASES: BHamilton, Cincinnati, 31; DGordon, Miami, 22; GPolanco, Pittsburgh, 17; Revere, Philadelphia, 17;

Hisburgh, Theveler, Filliadelphia, 17, Blackmon, Colorado, 15; Pollock, Arizona, 14; Upton, San Diego, 14.

PITCHING: GCole, Pittsburgh, 10-2; Wacha, St. Louis, 9-2; BColon, New York, 9-4; Shields, San Diego, 7-0; CMartinez, St. Louis, 7-3; Lincecum, San Francisco, 7-3; Bumgarner, San Francisco, 7-4; deGrom, New York, 7-4; Harvey, New York, 7-4; Scherzer, Washington, 7-5. ERA: GCole, Pittsburgh, 1.71; Burnett,

Pittsburgh, 1.89; Scherzer, Washington, 1.93; Greinke, Los Angeles, 1.95; SMiller, Atlanta, 2.02; deGrom, New York, 2.33; Wacha, St. Louis, 2.48.

Wacha, St. Louis, 2.48.

STRIKEOUTS: Kershaw, Los Angeles, 122; Scherzer, Washington, 113; Shields, San Diego, 104; Hamels, Philadelphia, 103; Liriano, Pittsburgh, 99; GCole, Pittsburgh, 93; deGrom, New York, 90.

SAVES: Melancon, Pittsburgh, 22; Rosenthal, St. Louis, 21; Familia, New York, 19; Storen, Washington, 19; Grilli, Atlanta, 18; Capilla, San Erapsico, 18; Kimple, San Er

18; Casilla, San Francisco, 18; Kimbrel, San Diego, 17.

WILDFIRE

FROM PAGE A9

make an insurance claim. There are many things in the home you may not remember during a crisis. A video of the interior of the home is a helpful asset for this.

Moving farther out from the house, consider the first 10 feet or so that surround it. Organic mulch, woody shrubs and plants, and juniper bushes all could ignite and thus allow flames to touch the house. Wind driven fire will create a blizzard of embers that will pile up in corners where you might have accumulations of leaves or needles around your home. These corners, nooks and crannies should be clear of any flammables. If there are any limbs or branches overhanging the roof, or close to the house, they should be trimmed back at least 10 feet. Keep your

grass mowed low and well watered

Create fuel breaks such as driveways, gravel walkways and lawns. Keep all trees and shrubs pruned at least 6 to 10 feet above the ground. Carrying this thinking out further away from the house, the next area to consider is that which may extend up to two hundred feet away. This area should be kept as thinned out as possible but because of varying factors such as topography, the recommended distance to mitigate for radiant heat exposure could actually extend beyond this distance. In this area. remove smaller trees that are growing between the taller ones Remove taller trees to reduce the density so that none of the canopies are touching. Again, all woody and flammable material accumulated on the ground should be removed and all the trees and shrubs must be

trimmed 6 to 10 feet from the ground.

The unpredictable

In previous columns we discussed the need for a bug-out bag. This is an emergency kit you should have prepared with emergency supplies, food, water, first aid equipment, prescription medicines, important papers and insurance information. If you have pets, make sure you have adequate supplies for them as well. Decide well in advance of fire season what you are taking with you and where you are going to evacuate. Plan in advance where you and family members will meet in case you are not together when a fire occurs. Designate a neighbor to evacuate your pets in case you are not able to return home during a

When there is an active

fire in the area pay close attention to the emergency channels and always know the status of the fire. Fires change constantly with the everchanging weather conditions. The larger that a wildfire becomes, the more unpredictable it is. A sizeable fire can actually create it's own weather, to include storm-force ember blizzards advancing far out in front of the

actual fire. What was a

small and mostly contained fire can blow up into a serious threat in a matter of minutes. Have your emergency supplies and must-have items in the vehicles so that you can evacuate quickly.

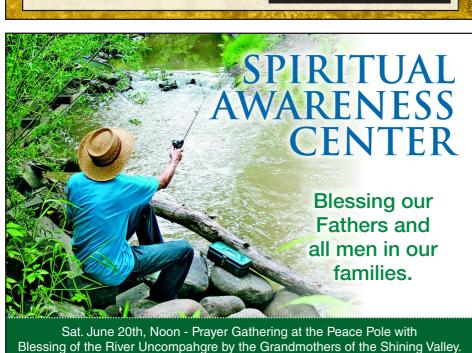
It has been quite a number of years since a wildfire has threatened the Montrose area. As the number of years since such a fire widens, so does the complacency of residents. Take a few steps

now to prepare yourself, family and property for a potential wildfire.

Further information is available at www.firewise. org. Until next time, stay safe and prepared, and see you on the trail.

Mark Rackay is a freelance writer who serves as a Director for the Montrose County Sheriff's Posse. For information about the Posse call 970-252-4033 (leave a message) or email info@mcspi.org.





Father's Day Service & Blessing of the Men Sunday 10:45 am Rev. Arlyn Macdonald Rev. Ruby Salaz, Asst. Minister Rev. Tony Roberts, Music Director 252-0908 • Lions Park, 602 N. Nevada • www.spiritaware.org Everyone is welcome!



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