



## **THE SPOKES SPEAK - GEARED TO SERVICE**

### **Rotary Club of the North Fork Valley**

**POB 1543, Paonia, CO 81428**

**WEB SITES: [www.rotary.org](http://www.rotary.org) [www.rotary5470.org](http://www.rotary5470.org) [www.paoniarotary.org](http://www.paoniarotary.org)**

**Meeting Thursdays at Noon in the Paonia Town Hall**

**District 5470**

**Club 1180**

**Vol 54 Issue 13 April 7, 2016**

**LAST MEETING: March 24, 2016**

**ANNOUNCEMENTS: Betsy hosted the Fifth Thursday social to be held on Thursday, March 31.**

**PROGRAM: Dr. David Noe, a fourth-generation Coloradan, attended University of Northern Colorado, University of Texas at Austin and Colorado School of Mines. He recently retired from the Colorado Geological Survey, where he served as chief engineering geologist. He managed the STATEMAP geological mapping program in Colorado that is one of three components of the National Cooperative Geologic Mapping Program. He lives in Paonia and is also a board member of the Western Slope Conservation Center.**

**Noe gave a Powerpoint presentation on the geology of Western Colorado. He wanted to share the story of the landscape of the North Fork Valley, giving a little bit of a background on the geological story behind all the beautiful scenery and "what makes it possible for all of us to live in this wonderful area." The geology of the area has been studied for about 140 years, said Noe. In the late 1800s men came to survey for the federal government. Noe started surveying the geology of the area in 2006 in the Montrose area.**

**Using maps and photos, he described some of the features and different geologic units of the Black Canyon area, the ancient lava flows that occurred about 11 million years ago on what is now Grand Mesa, and the Piceance Basin, which starts near Paonia, and its relation to the Grand Mesa, the Green River Formation, and the West Elk mountain range.**

**The Gunnison Uplift is made of Precambrian rock, some of the oldest rock around and forms the base of where we live. The Piceance Basin, shaped like a bowl, is very deep and goes to the north of us. The farms and hay fields of the area are built on the Dakota sandstone formation. The Mesaverde formation is important to the area's history because it's where the coal is found. There are between 40 and 60 underground coal seam fires happening in the Mesaverde formation of Colorado. Grand Mesa is capped by volcanic basalt lava rock, but it was never a volcano. Not all volcanic eruptions form a volcano, said Noe. With Grand Mesa, instead of forming a volcano, the molten rock came out of fractures and poured out over the landscape, much like a river of water. The mesa is made up of more than 20 basalt flows.**

**Noe talked about how he has mapped several old river beds, and how the Colorado River has migrated over time, digging deeper and deeper into the earth's surface and leaving deposits as it goes. That's how the Grand Mesa was formed.**

While the West Elks and Mt. Lamborn and Lands End, which he described as "Hershey's Kisses," look like old volcanoes, they aren't. They are formed from molten magma, like the top of Grand Mesa. They were formed when molten rock pushed its way up from below. The rock on top that was originally flat got pushed up, too. This formation is somewhat unique to Colorado, which has more of this type of formation than anywhere else in the world. There were volcanoes in the area about 30 million years ago, mostly to the south of Paonia. Mendicant Ridge southeast of Crawford is made of volcanic rock.

The Mancos shale is about 4,000 feet thick in this area and is some of the softest rock in the area. Much of it has eroded away by the rivers.

Noe is giving a series of talks on his involvement in surveying and mapping the geological features and zones of Western Colorado. Presentations will be given at 6 p.m. Tuesday, April 19, at the Paonia Library; at 5 p.m. Tuesday, May 10, at the Hotchkiss Library; and on May 12, at the Crawford Library, with the time to be announced later. Talks are sponsored by Delta County Library District and Western Slope Conservation Center

**ROTARY INTERNATIONAL:** The April Rotary theme is The Rotarian Magazine. Below are excerpts from a lengthy essay Paul Harris wrote for the first issue of The National Rotarian.

Vol. I. January, 1911. No. 1. "RATIONAL ROTARIANISM", by Paul P. Harris, National President.

If by interposition of Providence I some day were to find myself standing on a platform in some great Coliseum looking into the eyes of every living Rotarian, and were to be told that I could have one word to say, without an instant's hesitation and at the top of my voice, I would shout "Toleration!" . . .

Whether or not it is dishonorable to join a club for business purposes depends upon the club, its principles and what one professes to join it for. . . . If this Rotary of ours is destined to be more than a mere passing thing, it will be because you and I have learned the importance of bearing with each other's infirmities, the value of toleration.

Rotary is entirely without precedent in the history of clubdom. We have had no rules except such as have been gathered from the creative imagination of the men who have been responsible for our destinies. . . . [T]he forefathers of Rotary, observing the rules that have from time immemorial influenced the lives of men, skillfully guided their craft in perilous, unknown and trying circumstances. May we never, in time to come, depart from the safe course of rational toleration and humane consideration of the convictions of others.

#### UPCOMING MEETINGS:

April 14: Dr. Jerry Nelson, on "Climate Change and Food Security"

April 21: Ron Godin, on Growing Hops

April 28: Mark Roeber, "State of the County"

May 5: Kathy Welt, on West Elk Mine and the coal industry

May 12: Brian Wegner, on his time as a nuclear sub commander

