THE SPOKES SPEAK - GEARED TO SERVICE

Rotary Club of the North Fork Valley

POB 1543, Paonia, CO 81428

WEB SITES: rotary.org rotary5470.org northforkrotary.org

Meeting Thursdays at Noon in the Paonia Town Hall

District 5470 **Club 1180 - Chartered 12/20/22**

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LAST MEETING: September 3, 2020 (via Zoom)
President Campbell presided.

Visiting Rotarians: None
Other Guests: Johnny Weiss – Solar Energy International (SEI)
Key Guest: No key guest
(Annette now has the key).

ANNOUNCEMENTS:

- We had 46% turnout for the Zoom meeting today.
- The KPP lasagna dinner supporting Friends of Gueoul is October 5th. Volunteers to help distribute the meals are needed. Contact Judy.
- Committee Chairmanship positions available for:
  - Public Relations Committee. Facebook familiarity (or willingness to learn) would be helpful.
  - Fundraising Committee. Ideas for non-contact fundraising needed.

  Contact Pam or Randy.
- Guest Johnny Weiss has joined a task force forming in collaboration with a new Rotary Action Group focused on supporting a sustainable environment. The focus will be on helping Rotary International get involved with solar energy projects worldwide. Mr. Weiss has been involved in international solar work for some time both personally and through his work with SEI.
- Anyone wishing to take over as Newsletter Editor is welcome to do so. Contact a Board Member.

PROGRAM: North Fork Geology and Viticulture
Dr. David Noe

President Campbell introduced Dr. David Noe, a retired geologist who currently acts as tour guide for Colorado Detours and Western Colorado Wine Tours, companies he runs that are based in Paonia and provide guided sightseeing tours in the area. His presentation today is about how the geology of the North Fork Valley influences the viticulture of the North Fork Valley.

Dr. Noe began by thanking members Judy Beggs for suggesting the topic, Pam Bliss and James Schott for facilitating the meeting, and Randy Campbell for the introduction. He then displayed and narrated a PowerPoint presentation, much of which consisted of photographs of various types of geologic formations as well as geological maps showing typical locations for these formations. As a geologist working for the

State of Colorado, much of his 35-year career was devoted to producing these geological maps of western Colorado.

He introduced the concept of "Terroir", which encompasses all of the factors that influence the production of wine and makes it taste the way it does. Both climatological and geological factors, as well as decisions made by the winemaker, influence the characteristics of any particular wine.

Several different types of rock formations are prevalent in the North Fork Valley. Mancos Shale provides the bedrock of the valley. It was created 90 million years ago when the area was covered by a vast inland sea stretching from Iowa to western Utah. Mud at the bottom of the sea was transformed over time into shale and mudstone. This rock is very soft, allowing rivers to erode it easily, forming the valleys and other features.

Other primary factors in the geology of the area are the 23 lava flows that cap the Grand Mesa. This basalt gets washed off the top of the mesa by various processes and deposited on the mesas and in the valleys below. These deposits have a major bearing on how wine is grown and the fertility of the soil in the area. Most of the soils in the North Fork Valley area contain basalt boulders and smaller basalt debris. This volcanic material enriches the soil created from the Mancos Shale.

Surficial deposits such as river gravel from both contemporary and ancient deposits washed away from the bedrock and down into the valleys at different times are yet another factor. Tributary streams originating on the both the Grand Mesa and the West Elk mountains contribute sediments as well, and appear as alluvial mud flow fan deposits. Modern deposits lower in the valleys consist mainly of mud eroded from the Mancos Shale as there is not enough flow from the current streams to transport large basalt boulders.

Windblown silt known as "loess", created by glacial action and sparse vegetation, forms additional deposits found in the area.

Geological maps of the area show how the patchwork of these various materials and geology fit together on the land. These features and their locations determine what can be grown and where as some are better suited to agricultural uses than others. Dr. Noe illustrated this by showing on the maps where the 13 area vineyards are located.

Features influencing vineyard locations include:

- Aspect: The direction the land faces. Most vineyards face south or southeast.
- Landform: Most vineyards are on intermediate mesas or in valleys that contain intermediate deposits. Only two vineyards are in the stream valley itself. The Mancos Shale outcrops that surround the valley are also poor areas for growing grapevines as is any other bedrock formation. Mancos mud deposits contain a lot of salt, which makes them poor for growing grapes as well. Large landslide deposits are unstable and higher altitude alluvial deposits may contain too much caliche and are difficult to irrigate.

Deposits in the stream valley are Holocene in age and were formed since the last glaciation. Other deposits are from the Pleistocene, over the last 800,000 years or so when glaciers were able to leave deposits of various kinds.

Different gravel deposits have different characteristics in terms of the types of sediments that are there, the way cements form in the sediments (which affect water flow and root growth) as well as water permeability and retention. The presence of caliche is another factor to consider and can often be an advantage for grape growing if not too abundant.

The geological environment of a vineyard affects to some extent the varieties of grapes that can be grown there. Dr. Noe displayed a series of maps showing where particular grapes tend to be grown. He pointed out that Pinot Noir is the premier type of grape grown in the North Fork, and the vineyard across from Root and Vine on CO 133 has the highest yield of Pinot Noir grapes in all of Colorado. Merlot, Chardonnay and Riesling tend to be grown higher up-valley. Gewürztraminer and Pinot Gris are grown in a variety of areas scattered about the North Fork on a variety of terrain. In general, though, the types of grapes grown have more to do with the vintner's choice than the geology of the vineyard.

New varietals are being grown in the area, and the wide variety of grapes and wines being produced make for interesting wine tours, providing both an old world and a new world experience. However, some grapes need to be obtained from areas such as Palisade, where grapes that do better in a hot environment thrive.

UPCOMING MEETING PROGRAMS:

Date	Speaker	Program	Member
9/10/20			Peggy Szvetecz
9/17/20	Cassandra Shenk	Crow Tribe leadership and tribal council	Greg Thompson
9/24/20	Scott Horner	Small Potatoes Farm	Bain Weinberger
10/1/20			John Zachman
10/8/20	Cynthia Houseweart		Judy Beggs
10/15/20	Luke Reschke	Water Commissioner	Jackie Parks
10/22/20			Bill Bishop
10/29/20		Fifth Thursday	
11/5/20			Sarah Bishop
11/12/20			Norm Lewark
11/19/20			Nick Lypps
11/26/20		Thanksgiving	
12/3/20			Randy Campbell
12/10/20			Annette Choszczyk
12/17/20			John Coombe
12/24/20		Christmas Eve	

Rotary Opens Opportunities

ROTARY INTERNATIONAL

Rotary PEOPLE OF ACTION