Country Squires of New London, NH Minutes for the Meeting on Thursday, March 14, 2019 at Eastman

*Welcome: President Tom Nowell welcomed members, guests, new member candidates and our guest speaker Dr. Scott Rappeport at noon.

*Invocation: President Nowell asked Squire Tom Vannatta to give the Invocation. Squire Vannatta recited the poem by Christian D. Larson, "Promise Yourself."

"To be so strong that nothing can disturb your peace of mind.
To talk health, happiness, and prosperity to every person you meet.

To make all your friends feel that there is something in them To look at the sunny side of everything and make your optimism come true.

To think only the best, to work only for the best, and to expect only the best.

To be just as enthusiastic about the success of others as you are about your own.

To forget the mistakes of the past and press on to the greater achievements of the future. To wear a cheerful countenance at all times and give every living creature you meet a smile.

To give so much time to the improvement of yourself that you have no time to criticize others.

To be too large for worry, too noble for anger, too strong for fear, and too happy to permit the presence of trouble.

To think well of yourself and to proclaim this fact to the world, not in loud words but great deeds.

To live in faith that the whole world is on your side so long as you are true to the best that is in you."

*Luncheon: We enjoyed our St. Patrick's Day-inspired lunch of corned beef and cabbage, followed by carrot cake for dessert.

*Squires Meeting: At 1:00 O'clock President Nowell began the meeting by asking members to introduce members' guests and possible new members.

Squire Art Rosen introduced guest Dick Schowalter, who has lived in New London for the past four years. He is a US Navy veteran and spent 25 years as Dartmouth-Hitchcock's Chief Financial Officer.

Squire Dave Blohm introduced member candidate Rob Fuller. Rob grew up in Hanover and had a varied and colorful career as a Navy aviator and Commander of a squadron on the aircraft carrier USS Ranger, a private pilot, a cattle ranch manager, and as the health and safety officer at Dartmouth-Hitchcock.

Squire Dave Borden introduced member candidate Doug Darling. Doug grew up on the Kearsarge area. He has a PhD in molecular biology, and conducted research at the University of Chicago, Brigham and Women's Hospital, Harvard Medical School and at the University of Louisville. He is now a teacher at AIL and a member of the Kearsarge Chorale.

A motion was made to accept Rob and Doug into the Squires. The motion was seconded and were voted in unanimously by acclamation. President Nowell welcomed Rob and Doug into the Squires with official Squires pens.

Guest Speaker: President Nowell asked Squire Art Rosen to introduce our guest speaker, Dr. Scott Rappeport, PhD.

Squire Rosen began by saying that the American writer, historian, and philosopher Will Durant once said, "Civilization exists by geologic consent, subject to change without notice." Large volcanic events have always had impacts on civilization whether directly through physical interactions and indirectly through climate alteration. Dr. Rappeport will discuss the global climatic impacts of massive volcanic eruptions that occurred in 536 AD and 540 AD. These eruptions likely altered the course of history in Western Europe and the Byzantine Empire. These eruptions may have been a key factor in introducing the bubonic plague (the Justinian Plague) into Europe during this period.

Dr. Rappeport resides in Sunapee NH. He is a retired marine geologist and system engineer. He received his PhD from Stanford University in 1981 in Applied Earth Sciences. He had a varied career in R&D with the US Geological Survey, Exxon, AT&T Bell Labs, AT&T Labs, and General Dynamics. He led engineering teams in offshore geologic studies and developing reliable electronic and mechanical systems for harsh marine environments. His talk was titled "The Events of 536 through 546 AD - Volcanism, Plague and Empire Decline (Dry Fogs, Red Sunsets and Fleas)."

The decade beginning in 536 AD was a terrible time. A dry dust fog plunged Europe into darkness and low temperatures. Agriculture collapsed due to the low temperatures, reduced precipitation levels, and reduced growing seasons. In 539, bubonic plague came to Europe, killing an estimated 1/3 to ½ of the population. Cities died, the empire died, and these effects were felt globally. Mayan and Mochan civilizations in the New World declined, and China recorded snow in summer, famine and widespread disorder.

There is evidence of three volcanic eruptions occurring in the world around that time. Which one was responsible is a matter of conjecture. Having three occur in roughly the same time frame may have enhanced the effects of each one individually. What is not a matter of conjecture is the impact on climate. The evidence is supported in tree growth patterns seen in the rings as well as in ice core data from Greenland and Antarctica.

Reduced temperatures expanded the possible range of fleas and the bacteria <u>Yersinnia pestis</u>, the causative organism of plague that the fleas carried and transmitted. The normally higher temperatures of the equatorial Mediterranean area was a barrier to <u>Y. pestis</u> transmission because it prevented biologic development within the flea. It also affected the biting behavior of the flea, making them bite more frequently for shorter periods of time. This was another barrier to effective bacterial transmission. The lower climatic temperatures caused by the sunlight being blocked by the volcanic ash removed those barriers and enabled the range of active transmission to expand.

If this combination of climatic change, agricultural collapse, and deadly epidemic was to occur today, we would need to have greater resilience in our agriculture, medical care and social institutions if humanity is to survive. We also need to recognize the power of geologic processes and be ready to meet their challenges which often happen with little to no warning.

*Speaker Appreciation: Following Dr. Rappeport's talk, President Tom Nowell presented him with the often imitated, always envied and most prestigious Squires Mug as a token of our thanks.

*Old Business: None.

New Business: President Nowell reported that Squire Art Rosen suggested that we consider holding a second Ladies Day meeting during the summer. This will be discussed at the April meeting.

*Next Meeting: Our next meeting will be held on Thursday, April 11. The speaker will be Sarah Adams, who will talk about an assisted living facility being built next to New London Hospital.

* Motion to Adjourn: A motion to adjourn was called for, seconded, and agreed to by acclamation by the members.

Respectfully submitted,

Paul Etkind, Secretary 14 March 2019