

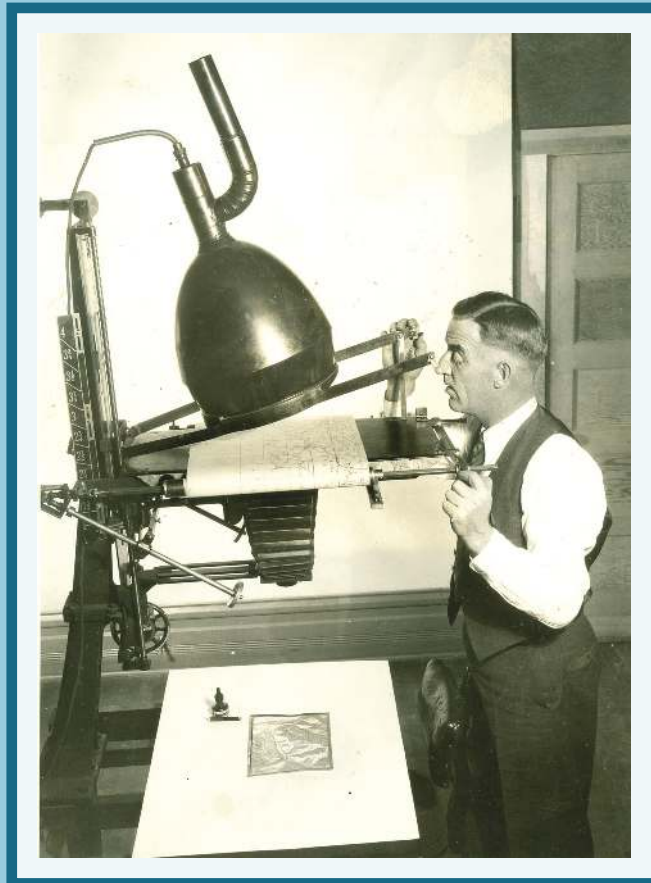


National Museum Of Forest Service History

Winter 2018-2019

VOLUME 30, NUMBER 4

James B. Yule U.S.F.S. Pioneer of Aerial Photography & Photogrammetry



James B. Yule pioneered the revolutionary use of aerial photography to make maps of the nation's new forests, and thereby led the way to the production of maps of an accuracy, detail and caliber never before seen. In 1911 Jim began his career in the United States Forest Service. Over the next 36 years he gave the Service his loyalty, energy, resourcefulness, creativity and leadership. The impact of that work on the development, protection and management of the National Forests was monumental.

Here is part of his story.

Jim was a true son of Montana. Born at Summit Station, Montana Territory, on February 21, 1884, he was the son of Scottish immigrants who came to Montana through eastern Canada, and finally settled in Toole County in an area dubbed Scotch Heaven. Eventually the Yule ranch was located between present-day Dupuyer and Bynum, an area rich in natural beauty and even more rich in opportunities for a boy to explore, to learn about the vicissitudes of the natural world and to love the very land itself in which his roots were so deeply and productively planted.

Continued on page 3

NEWSLETTER

NATIONAL MUSEUM OF FOREST SERVICE HISTORY

A Non-Profit Corporation
P.O. Box 2772
Missoula, MT 59806-2772
Phone: (406) 541-6374
Fax: (406) 541-8733

EMAIL

office@forestservicemuseum.org

WEB

www.forestservicemuseum.org

BOARD OF DIRECTORS

President: Tom Thompson
Vice President: Dave Stack
Treasurer: Mike Paterni
Secretary: Beryl Johnston
Elizabeth Agpaoa
Phil Aune
Dale Bosworth
Fred Cooper
John Drake
Larry Gadt
Nancy Gibson
Jim LaBau
Patricia Limerick
Pat Lynch
John Maclean
Andy Mason
Char Miller
Michelle Pearson
Tom Pettigrew
Charlie Richmond
Mark Rey
Tony Schoonen
John Steffenson
Zane Smith Jr.
Lynn Sprague
Richard Stem
Onno Wieringa
Tracy Hancock, Ex-officio
Brandon Smith, Ex-officio
Max Peterson- Emeritus
Grey Reynolds-Emeritus
Doug Leisz-Emeritus
Dave Scott-Emeritus

NEWSLETTER

Lisa Tate, Editor & Executive Director

The NEWSLETTER is published quarterly for members and supporters of the National Museum of Forest Service History, a nonprofit corporation dedicated to sharing the rich history and story of America's Conservation Legacy.

© NMFSSH 2019

Presidential Musing-



*Tom L. Thompson, 1969, Alaska...50
years ago ain't that long ago*

As the year 2019 begins to unfold I have reflected a bit on the historical significance of this year. For some who are still working, or wanting to work if this "shutdown" could be ended, it has already been a historically difficult year. In looking back, it is a year of some historical significance: a hundred years ago World War I had just ended, T. R. Roosevelt died, prohibition began, and the 19th amendment was passed by Congress which guaranteed suffrage to women. This year is, of course, Smokey Bear's 75th birthday. It is the 50th anniversary of the Environmental Policy Act. Fifty years ago we witnessed the first landing on the moon with Apollo 11, the Boeing 747 was introduced, for the first time you could go to an ATM and get some cash, the average price of a new home was \$15,550, a new car \$3,270, and a gallon of gas was 35 cents. Fifty years ago I was a new forester working on the Tongass National Forest in Alaska. All this is history and history gives us perspective and fifty years doesn't seem like too long ago.

Webster defines history as either: 1/ chronological record of significant events, 2/ study of past events, or 3/ an established record. It is interesting to me that this definition doesn't include any reference to people. As I look at the various writings or works on the history of the Forest Service it is apparent that a good slice of our history is really a remembrance of people: people who made a difference, people who accomplished something noteworthy and lasting, people who pioneered the way, people who had new ideas, people who were willing to do what others wouldn't or couldn't, people who stood out or stepped forward, and yes, people who were willing to lead or teach others.

Looking at our Forest Service beginnings, when we most often refer to our history we are referencing Pinchot, Roosevelt, Greeley, Carhardt, Leopold, Marshall, or leaders like that. Even many of our principal laws bear the names of people: Weeks, Clarke, McNary, McSweeney, Knutson, Vanderberg, Granger, Thye, Bankhead, and Jones. Just as we refer to periods of time on a broader national scale through different Administrations, we also refer to periods of Forest Service history by who was Chief, like Watts, McArdle, Cliff, McGuire, Peterson, Robertson, Thomas, and Bosworth.

Of course not everyone is in a position to have legislation named in their honor or be able to sit at Gifford Pinchot's desk as Chief in Washington, D. C. But at all levels of the organization it is true that the history of the outfit is a history of people. On each District, on each research unit, on each forest, and in each region, there are people who made a difference and left a legacy, that is our history. Just as this newsletter features the history of James B. Yule, a pioneer in maps and surveys, there are countless examples of individuals who together frame the history of the Forest Service. Indeed the mission of our Museum is to share the rich history and story of America's Conservation Legacy. That history and the story of America's Conservation Legacy is about people.

By remembering those who have gone before us and better appreciating the passion, commitment, and dedication they had to "Caring for the Land and Serving People" we hope to inspire those who follow to make a difference and ensure that the Forest Service legacy is sustained.

Well, so much for my New Year musing...let me just close by offering my sincere thanks for being a member and supporter of the National Museum of Forest Service History. I wish you a Happy New Year in this already historic year as we endeavor to remember that history is our way of honoring people who have made a difference.

James B. Yule *(continued)*

As a little boy Jim was inordinately shy, but upon entering adolescence Jim made the decision not to permit the pain of shyness to dominate his personality, and so with characteristic self-awareness and self-discipline, he began to move from introversion to the gregarious, outgoing individual he became in adulthood. This mind-set provides a glimpse into the kind of determined, disciplined problem-solving that characterized his later work in general, and in aerial photography and cartography particularly.

Like other ranch children the Yule kids rode horseback to a one-room school and deeply valued their opportunity to learn. Education was important! Upon completion of elementary studies, Jim was sent to live in Choteau to continue his education through high school. He roomed and boarded in the home of the Toole County High School principal, A.B. Guthrie, where one of his responsibilities was to take care of the new baby, A. B. Guthrie Jr. Upon Jim's graduation, Mr. Guthrie strongly encouraged him to cross the Continental Divide to the new University in Missoula where he would have the opportunity to study engineering. Jim concurred, and arrived in Missoula shortly after the turn of the 20th century with his high school diploma under one arm and five dollars in his pocket. He made an appointment with President Oscar Craig and asked to be admitted to the University, a request the President granted. Jim was off and running!

He reveled in all that the fledgling University had to offer, but because work at the ranch was demanding from time to time, both physically and economically, Jim had to leave school periodically to help his family. One of the great disappointments of his life was the fact that he had to leave University at the end of his junior year; consequently, he never earned the baccalaureate degree.

His handwritten memo tells the story :

1904-1905	<i>U of M</i>
1905-1906	<i>U of M</i>
1906-1907	<i>Out of school</i>
1907-1808	<i>U of M</i>
1908-1909	<i>On ranch</i>
1909-1910	<i>On ranch</i>
1910-1911	<i>In Great Falls working</i>
July 15, 1911	<i>Enter U.S.F. S.</i>

Thus it was that just six years after the formation of the United States Forest Service, Jim began his career with Region One where he made the Service his life's work.



Early days in the U.S. Forest Service

One of his first responsibilities was to draw maps of the newly created National Forests in the Northern Region, which meant surveying with boots on the ground, truly labor-intensive work. Jim was responsible for his survey crews, for arranging train travel to trailheads, for securing pack animals and supplies, and for setting up field camps, in addition to doing actual surveying. Accordingly, he often spent weeks and months "in the sticks" with survey crews and animals, arduously hiking and riding from one drainage to the next, and from ridge to ridge, surveying elevations by triangulation and always, always making precise, detailed notes in his field notebook. His official desk may have been in the Federal Building in Missoula, but his heart was out there in the woods and on the land.

Eventually the hardship---sometimes brutal hardship---of surveying on foot and horseback, prompted him to imagine a less difficult, more efficient and more accurate way to gather data for map-making. At some point in the 1920's (between getting married, building a new house and starting a family) he considered in earnest the feasibility of taking photographs from airplanes, and using them to create highly accurate, detailed maps of the National Forests.

James B. Yule *(continued)*



Jim Yule and pack animals. Setting out to do surveying

In all likelihood his thinking may have been influenced by the widely publicized use of airplanes in the First World War to fly reconnaissance over enemy territories. He wrote an unpublished, undated paper (presumably about that time) entitled “Aerial Photography” that includes an informal review of the published literature to date: Admiral Byrd photographing 2000 miles of Antarctic horizon; Captain Stevens of the Army Air Corps photographing an eclipse from the air in 1932; Earl Findley writing about the dramatic increase of passengers flying in America; Col. Blacker writing for National Geographic on aerial photography. He noted that “Numerous commercial concerns, both large and

small, have sprung up over the country like a flock of mushrooms and are equipped to do all kinds of aerial photographic work.” And finally, “The foregoing illustrates the advancement made by the airplane since Glenn Curtiss’ flight from Albany to New York in May, 1910, and gives some conception of the enormous opportunities opened to photography.”

He ran his ideas past his immediate superior, and was told they were ridiculous, impractical and had no future. As many creative people can attest, new ideas are often met with ridicule, hostility, insult and worse. Nonetheless, he believed his ideas had potential. Without support of any kind from his colleagues in Maps and Surveys, he began to explore his options privately.



Early Forest Service Men:

*Jim Yule left, Frank Cool fifth from left, and Dean Gregory, far right.
Arrow Junction, ID September 1913.*

Bob MacKay, another proud Scotsman, owned a photography shop on Higgins Avenue in Missoula. His name appears on numerous historic photographs of Missoula that document the growth of the city, its work and its culture. MacKay was open to innovation, so when Jim walked into his shop one day with an idea, Bob MacKay was all ears. Jim, who knew absolutely nothing about photography and who suffered from vertigo, asked MacKay to sell him a camera that he could take up in a plane to take photos of the mountains. MacKay sold him a simple box camera.

Bob Johnson pioneered flying around Missoula. Jim convinced Johnson not only to take him up in one of his planes but to cut a hole in the bottom of the fuselage large enough to accommodate the lens of the box camera. Why Johnson ever agreed to such a scheme is unknown, but he did.

James B. Yule *(continued)*

On a sunny day probably in the early 1930's, Jim and Bob Johnson took off from Hale Field and flew around the Missoula valley: Hellgate, the Rattlesnakes, Squaw Peak, Frenchtown valley, Blue Mountain, Lolo Peak, the Sapphires, Pattee Canyon and the Clark Fork and Bitterroot rivers. What was Jim's first lesson from that adventure? "Never photograph the landscape when there are clouds!" Apparently, the shadows they cast thwarted his inaugural attempt at aerial mapping.

In succeeding years Jim persevered in trying to convince his superiors in Region One of the merits of his vision of aerial mapping, but without success. He traveled to Forest Service Headquarters in the U.S. Department of Agriculture to educate and enlist the support of, as he called them, "the Big Boys in Washington." As Chief of Maps and Surveys for Region One, he wrote to and met with his counterparts in other Regions, always trying to help others see what he saw, to embrace the merit of his vision. After years of rebuff and ridicule, his efforts and persuasive arguments began to garner a base of support.

The historic First Maps and Surveys Conference, U.S. Forest Service, was convened in Missoula, Montana, May 6th to 12th, 1936. At this conference the Forest Service and the Coast and Geodetic Survey formally adopted Jim's vision that making maps with aerial photographs was far superior to previously used methods. Three "Big Boys from Washington" are in MacKay's photo of the meeting, together with Jim's counterparts from every other Region in the country, and Jim Yule himself, seated front and center, with a broad grin on his face. Over the next five years Jim and his team in Maps and Surveys produced hundreds, perhaps thousands, of maps of the national forests of the Northern Region, some of which remain today in Forest Service archives.



First Maps and Surveys Conference 1936 U.S. Forest Service, Missoula, Montana, May 6 to 12, 1936 First Row (left to right): H. E. Gruner, Marshall S Wright, F. E. London, Cullen E. Waldo, James B. Yule, G. H. Lautz, F. E. Thieme, R. B. Pidgeon, T. R. Littlefield, J. W. Ninneman, Back Row: M. W. Bird, Lage Wernstedt, C. J. Truscott, Edwin R. Sievers, F. F. Kemp, Victor Flack, J. E. King, H. A. Sedelmeyer, F. J. Cool, and H. C. Guettle. Attending by personnel from the Washington Office and other Regions

James B. Yule *(continued)*

On December 7, 1941, 370 Japanese fighters bombed the deep harbor at Pearl Harbor on Oahu, Hawaii. Within days, Jim was sent by the Forest Service to Bakersfield, California, to work for “the war effort.” Jim’s wife, Margaret, and their two young daughters, joined him two months later. In 1977 Jim’s daughter Valerie wrote a brief account of some of his California work.

After the bombing of Pearl Harbor . . . the U.S. Army badly needed up-to-date maps of the California coastline, so Yule was assigned to make these maps quickly by using his method of aerial photography. Upon completing this work he was transferred to the Guayule Rubber Project. At that time Japan had cut off most of the natural rubber supply to the Free World, so the United States was trying to develop its own source. Large acreages of California land had been planted with guayule, a Mexican milkweed, to produce natural rubber. Yule was in charge of finding suitable factory sites and supervising factory construction to produce the needed rubber.

The Yules returned to Missoula at the end of the war, and Jim retired in 1947 after 36 years in the Service.

Unexpectedly, another opportunity opened to Jim, one he could not resist because it embraced two of his great loves: forestry and education. His longtime friend, C.C. Delavan, worked in the College of Forestry at the New York State University campus in Syracuse. Delevan was in charge of the hands-on summer camp for sophomore forestry students located on Cranberry Lake in northern New York. He invited Jim to the summer camp to teach the young foresters basics in skills so critical to those who would be charged with the management and conservation of the nations forests. Jim became known as the camp’s elder statesman, and for eight exhilarating and deeply meaningful summers he was “in residence” at summer camp, working with the young foresters, and sharing lessons he had learned from life and his career in the Forest Service.

Jim Yule died on June 4, 1957.

*My native country, thee,
Land of the noble free.
Thy name I love,
I love thy rocks and rills,
Thy woods and templed hills . . .*

Written by Jamie B. Yule
December 14, 2018

Elder Statesman Jim Yule and his friend C.C. Delavan at the College of Forestry at the New York State University campus in Syracuse.



*Jim Yule, Jim Byrne, Frank Cool
Colleagues in the guayule rubber
project in California during
World War II. 1943*



Welcome New Board Members

Fred Cooper, Missoula, MT

Fred Cooper lives in Missoula, MT with his wife Cherie. He has been a member and supporter of the Museum for a number of years. He is a graduate of Oregon State University and started his career on the Malheur NF as a seasonal. He moved on to become a smokejumper in 1962 in the North Cascades in Washington and also spent several years smoke jumping out of Redmond, Oregon.

Fred has been an active member and leader of the National Smokejumper Association and been very involved in their volunteer trail work. He has written numerous articles for their newsletter/magazine related to the history and challenges of firefighting and smokejumpers in particular.

His career with the Forest Service was spent working in Human Resources and he worked in a number of different locations in the Pacific Northwest and then worked his last ten years in Washington, D.C. with the Department of Agriculture's Office of Personnel Management before his retirement to Missoula.

Char Miller, Claremont, CA (Pomona College)

Char Miller is the W. M. Keck Professor of Environmental Analysis and History at Pomona College, in Claremont, California. His most recent books include *Ogallala: Water for a Dry Land* (2018), *San Antonio: A Tricentennial History* (2018), and *Where There's Smoke: The Environmental Science, Public Policy, and Politics of Marijuana* (2018). Other books include *America's Great National Forests, Wildernesses, and Grasslands* (2016), *Gifford Pinchot: Selected Writings* (2017), *Not So Golden State: Sustainability vs. the California Dream* (2016), *On the Edge: Water, Immigration, and Politics in the Southwest* (2013), and *Seeking the Greatest Good: The Conservation Legacy of Gifford Pinchot* (2013). Miller, an award-winning teacher and writer, is a Senior Fellow at the Pinchot Institute for Conservation, a Fellow of the Forest History Society, and, under the aegis of High Ridge Leadership, contributes to the Middle Leadership Program for the USFS.

Charlie Richmond, Simpsonville, SC

Charlie Richmond retired from the Forest Service in 2014 after a 36 year career. He graduated from Colorado State University with his degree in Range/Forest Management. He worked as a District Range Conservationist on the Beaverhead, Rio Grande, Grande Mesa/Uncompahgre/Gunnison, and White River National Forests. He was the District Ranger for the Comanche National Grassland. Charlie also served as the Range Program Leader for the Rocky Mountain Region. Following his regional office assignment, he spent the next 14 years as the Forest Supervisor for the Ozark National Forest and the Grand Mesa/Uncompahgre and Gunnison National Forests. Charlie retired from the Washington Office where he served as the Director of Rangeland Management and Vegetation Ecology. Charlie and his wife Debbie reside in Simpsonville SC where he spends his time as a local volunteer, an involved grandparent, and helping his son manage a small tree farm.

John Maclean, Washington D.C.

John Maclean has won accolades across America as an author and journalist. After graduating College, Maclean started his journalistic career in 1964 with the City News Bureau of Chicago. He later worked for the Chicago Tribune and in 1970 was assigned to their Washington Bureau. John filled a post at the State Department and was chosen to cover the "shuttle diplomacy" of Secretary of State Henry Kissinger. He became the Tribune's Foreign Editor in 1988. Like his father, John knew there was a story of man and nature that must be told, and he must tell it. He fulfilled that destiny by leaving the Chicago Tribune in 1995 when he began to write *Fire on the Mountain*.

John continued to tell those stories by publishing the books: *Fire on the Mountain*; *Fire and Ashes: On the Front Lines of American Wildfire*; *The Thirty Mile Fire: A Chronicle of Bravery and Betrayal*; *The Esperanza Fire: Arson, Murder, and the Agony of Engine 57*; and *River of Fire: The Rattlesnake Fire and the Mission Boys*.

John is currently working on his sixth- a book about fatal wildland fires. John splits his time between the East, in Washington D.C., and that same family cabin at Seeley Lake, Montana.



National Museum of
Forest Service History
P.O. Box 2772
Missoula, MT 59806-2772

Non-Profit
Organization
U.S. Postage
PAID
Permit No. 569
Missoula, MT
59808

NOTE: Your mailing label shows the date your membership expires. Please mail dues payment 1-month prior to the date listed. This space is blank for complimentary copies of the newsletter. Please renew EXPIRED memberships as soon as possible to continue supporting the Museum.

MEMBERSHIP APPLICATION

Become a member of the National Museum of Forest Service History and help us preserve America's conservation legacy. To become a member, complete and mail this form, along with payment to: **NMFSH, P.O. Box 2772, Missoula, MT 59806-2772.** You may also join online by visiting www.forestservicemuseum.org

YES- SEND THE NEWSLETTER TO MY EMAIL **NEW** **RENEWAL** **GIFT**

Name: _____

Address: _____

City _____ State: _____ Zip: _____

Phone: _____ Email: _____

MEMBERSHIP CATEGORIES & ANNUAL DUES

- | | |
|--|--|
| <input type="checkbox"/> Individual \$30 | <input type="checkbox"/> Sustaining \$300 |
| <input type="checkbox"/> Family \$55 | <input type="checkbox"/> Organization \$100 |
| <input type="checkbox"/> Contributing \$150 | <input type="checkbox"/> Lifetime \$1000 |

I would like to make an additional donation of:
\$ _____

THANK YOU FOR YOUR SUPPORT!

- Check enclosed
 Please charge my credit card

Card number: _____

Exp: _____ CVV _____