

MOTES NOTES

SPRING & SUMMER 2025

Aspen by Lone Wolf/Hart Merriam Schultz (Blackfoot-Anglo)

Life in the Zone

New Museum of Northern Arizona exhibition to provide fresh look at Merriam's theory

THE MOUNTAIN CAN be seen for 100 miles, from the Hopi mesas and the rim of the Grand Canyon. When the temperature tops 100 degrees in the Painted Desert, sunlight still glints off the snowcapped peaks. Dook'o'oosliid, Nuva'tukya'ovi, San Francisco Peaks—regardless of name, the mountains draw the attention of people from miles around. It's a fitting backdrop for a new MNA exhibition called *Shifting Life Zones*, a fresh look at research done on the peaks nearly 140 years ago and what it tells us about our changing world.

In 1889 a scientist and his wife set up camp on the slope of the San Francisco Peaks. Clinton Hart Merriam chose the 12,600-foot-high mountain range for his first biological survey as chief of the newly established Division of Economic Ornithology and Mammalogy of the U.S. Department of Agriculture because of "its southern position, isolation, great altitude, and proximity to an arid desert."

Merriam knew of the mountain range from reports of other naturalists and scientists, including his college friend Edgar Mearns, who climbed the peaks in 1887 while studying the mammals, birds, and plants of the area. Merriam had also read detailed reports from Henry Rusby describing the plants growing at each elevation zone from the base to the summit. That was exactly what Merriam was looking for—a place to prove his theory that plants and animals live in zones determined by temperature, which can be seen on a global scale across the latitudes from the tropical equator to the frigid arctic, but also seen on the slopes of mountains rising out of the arid desert.

Merriam and his small team spent two months hiking around the San Francisco Peaks, with side trips into the Grand Canyon and Painted Desert. The life zone theory he published laid the foundation for modern ecology and was well known by the time Harold Colton hiked the same mountains on his honeymoon with Mary-Russell:

"For the biologist, the San Francisco Peaks are classical ground, for here C. Hart Merriam worked out his life zone theory which CONTINUED ON PAGE 6