

REPORT

John Muir

We had stopped to view the pillow lavas and columnar jointing at Dunbar, when I spied *John Muir Birthplace* in the High Street. "Who's John Muir?" I murmured, and Alan remembered the Muir Woods near San Francisco. Visits to Muir's birthplace and *An infinite storm of beauty – the Life and Achievements of John Muir* the City Art Centre in Edinburgh inspired us to learn more.

When John Muir was born in 1838, geology was not regarded as a separate science and "Noah's flood" was held to be responsible for much of the way the Earth looked. In the 1820s and 1830s the work of men like James Hutton became accepted, and in the 1840s Charles Lyell and Louis Agassiz influenced contemporary ideas following successful lecture tours in America.

In 1870 Muir guided geologist Joseph Le Comte around the Yosemite Valley in California, and pointed out evidence of glacial action that supported Agassiz's theories. In the following year, the New York Tribune published John Muir's first article, on the subject of glaciers. Despite his geological successes, John Muir is better known to many EMGS members for his role in preserving for posterity many of the geological sites that they have visited.

Thanks to John Muir, Yosemite became part of the surrounding National Park in 1891, some 19 years after Yellowstone had become the first designated national park in the USA. Following further work by Muir, Mt Rainier became a National Park in 1899, as did Petrified Forest in 1906; Grand Canyon National Park and Muir Woods National Monument were established in 1908. Society members who have visited Alaska will be aware that in 1879, on his first trip north, Muir entered Glacier Bay as far as the glacier that was later named after him.

Muir's interests encompassed all the natural world. On a youthful journey home from university he noted 200 flowering plants along one 200-yard stretch of an Illinois trail. He was an enthusiastic climber, and made the first ascent of Mount Ritter in 1872 and the first recorded ascent of Mount Whitney's eastern route the next year.

Perhaps John Muir's respect for the natural world developed in Dunbar, where he was third of seven children. He started school at the age of three, and later progressed to Dunbar Grammar School where he included geography in his studies. John's father, Daniel Muir, was a member of the Disciples of Christ sect, which led to Daniel and the three elder children emigrating to Wisconsin in 1849, the year of the Californian Gold Rush. After only a few months they were sufficiently established to send for Mrs Muir and the rest of the children.

Through the 1850s John worked on the farm. Daniel Muir opposed his son's attempts at learning; to his mind a knowledge of scripture and religious writing was all that anyone needed. John cut down his hours of sleep to give him time to learn maths, geography, literature and philosophy and read Hugh Miller's *In the Footsteps of the Creator*. He was fortunate that neighbouring farmers, fellow Scots, were willing to supply books and encouragement.

He constructed clocks and barometers and contrived inventions, which he exhibited at the 1860 State Fair in Madison, where he accepted an offer to work in a machine shop in return for instruction in mechanical drawing. In lodgings he met students who were admitted to the University of Wisconsin for one dollar per week. Despite his scrappy early schooling, Muir studied chemistry, natural history and geology and first encountered the ideas of Agassiz, Lyell and Huxley.

John Muir spent three years at the university, returning to the farm to help with the harvest each summer. Meantime North and South were heading towards war. Wisconsin was alive with recruiting agents, and many farm boys volunteered to serve in the army to escape the boredom of farm life. In March 1864 Congress passed the Enrollment (sic) Act requiring males of 18-45 years, who were American citizens or "aliens wishing to become such", to enrol for military service. Those who dodged the draft by leaving to work elsewhere were said to have "skedaddled"; John and his brother Daniel "skedaddled" to Canada. John studied plants around Niagara Falls, and worked with Daniel in a broom factory.

After the war John Muir returned to the USA to work as a foreman-engineer in a carriage factory in Indianapolis, then the great Railway City of America. While adjusting a machine he was injured in the right eye, and his sight would never again be perfect. He set off with a friend to walk through Illinois to Wisconsin, where he spent the rest of the summer with his family. From Wisconsin he walked 1600 km to Florida via Kentucky, North Carolina and Georgia. After a bout of malaria, he took a ship for New York, and then sailed to Panama, crossed the isthmus by railroad and went on by boat to San Francisco.

The 30-year-old Muir chose the quickest route out of town, making for Yosemite through wheat fields, orchards and alfalfa meadows. From the top of the Pacheco Pass he saw for the first time the Sierras, 150 km away. During eight days in Yosemite Muir sketched, explored the waterfalls, collected flowers and saw his first sequoias. To keep himself he broke horses, manned a ferry and sheared sheep, but continued his botany studies, noting 550 mosses in an area measured in inches.

After the wet winter of 1869, John Muir explored the mountains, having undertaken to move sheep there, and in August he made the first ascent of Cathedral Peak above the Yosemite Valley. So began

his ten "Yosemite Years" during which he was camped out among the sequoias of the Mariposa Grove, that were preserved for posterity by his efforts. The next few years read like a Boys' Own adventure, establishing the pattern which he followed for the rest of his life, spending winters in "civilisation" and summers exploring the wilderness.

Summer 1877 saw John visiting friends in San Francisco, where he met the Polish emigrant Dr John Strentzel and his American wife, Louisiana. Their daughter, Louie Wanda, was destined to be a concert pianist, until she married Muir in 1880.

In 1895 Muir was at last able to re-visit Dunbar and Edinburgh, before moving on to London and through Europe. He followed in 1903-4 with a world tour through London, Paris, Russia, Korea, Japan, China, India, Egypt, Australasia, Malaya, Philippines, Hong Kong and Hawaii.

Returning home, Muir took his daughter Helen, then recovering from pneumonia, to the Arizona desert, where she had been advised to live for a year to strengthen her lungs. He was summoned home by the news that his wife Louie was gravely ill, and she died of lung cancer a month later. Despite long periods spent apart, it had been a happy marriage.

John Muir spent time with his convalescent daughter at the Petrified Forest, where he realised that the serious-minded visitors were followed by despoilers who dynamited the logs to sell the pieces of agate. Muir threw himself into the fray and made

a study of the Petrified Forest, that led to the site being made a National Park the following year. He continued to campaign to protect wilderness areas until, in that watershed year of 1914, he died in Los Angeles.

But that is not the end of the story. The American National Parks where John Muir worked were joined in 1974 by the John Muir Country Park in Scotland, a protected area of unspoilt coastline around Dunbar. In the same town, his birthplace opened to the public in 1980.

"When we contemplate the whole globe as one great dewdrop, striped and dotted with continents and islands, flying through space with all the other stars, all singing and shining together as one, the whole universe appears as an infinite storm of beauty." This poetic vision of our universe has a surprisingly modern feel, but it was written by John Muir in *The Story of My Boyhood and Youth*, published in 1913. His other books include *The Mountains of California* (1894), *Our National Parks* (1901), *Stickeen* (1909), *My First Summer in the Sierra* (1911) and *The Story of my Boyhood and Youth* (1913).

On his death in 1914 John Muir was elevated to the status of a "Father of the American National Parks", along with Ralph Emerson, Henry Thoreau and John Audubon.

*Pauline Dawn
Stamford & District Geological Society*



Yosemite Valley, with Half Dome in profile on the left, seen from the top of Cloud's Rest.