

Jim Lindsay's Biography III 2012-2013

The year unfortunately starts with the death of my Father due to accident with an electric revolving-door.



Patrick Mathew Lindsay

December 22, 1924 - April 4, 2012

My father, Patrick Mathew Lindsay was killed on April 4, 2012 after a great 87 years of life. He was born on December 22, 1924 in Beaver, UT to Charles & Cora Briggs Lindsay. He was the last surviving of 9 children. My father attended Beaver High School and was elected Student Body President his Senior Year, 1943. He excelled at sports and was the high school quarterback, a varsity basketball player, and track star (high jumper, pole vaulter, & sprinter). After high school he worked a short time at MGM Studios in Beverly Hills, CA.

Shortly after graduation, dad was drafted in the Army and served his country in WWII. He served in the South Pacific with the 40th Combat Division and later with the 745th Military Police on the Hawaiian Islands. Upon returning, he attended his first year of college at BYU. On July 13, 1948, Dad married Lola Louise Gale from Beaver, UT. He attended Branch Agricultural College (SUU) that fall, and then finished his schooling at Utah State University, where he earned a Bachelor's. My father was a high school teacher in Utah for over 20 years. He taught at Kanab, Panguitch, & spent 17 years at Beaver High. He taught English, history, math, physiology and coached football, basketball, track and wrestling. He also worked a short time for Geneva/ U.S. Steel at the Cedar City Iron Mines.

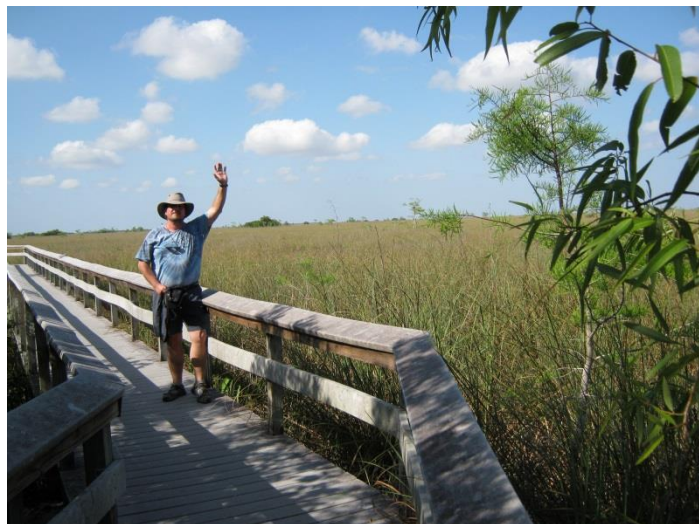
My father was an avid sportsman. Beginning in his youth, he spent his free time angling the beautiful streams and lakes on Beaver Mountain & hunting deer with his brothers and children. When he wasn't on the mountain, he was found telling grand stories about his excursions. He was well known for his descriptive and interesting stories, including the time he caught a 35" Brown trout out of Little Res. using a fly rod and a fly he tied himself. Dad enjoyed golfing and competed in regional tournaments. He even golfed in his last week of life. Dad was a great conversationalist and enjoyed telling stories to his grandchildren. He loved sharing his knowledge of golf, coaching, geology, hunting and fishing with his family. He is truly loved and will be sorely missed.

My father was survived by Wife, Lola Louise Gale Lindsay; children Helen DeMille (David), of Cedar City, UT, Jennifer Palmer (Milo) of Beaver, UT, Kriston Lindsay (LaRayne), of Paragonah, UT, & James Lindsay (Becky) of Clearfield, UT; 11 grandchildren and 17 great-grandchildren. He was preceded in death by his sisters Marion Robinson, Mildred Yardley, Norma Santillo, Virginia Cassidy, and brothers Jim Lindsay, Charles Lindsay, Daniel Lindsay, & John R. "Mick" Lindsay.

Spring Break 2012 in Florida:



Becky and I visit the “**Big Cypress National Preserve**”. About third of Big Cypress is covered by Cypress trees, mostly the dwarf pond cypress. Water play a central role in the lives of everything here and supports a rich diversity of wildlife. Birds include herons, egrets, wood stork, and the red cockaded woodpecker. One of the most endangered animals is the black Florida panther.



The “**Everglades National Park**” of Florida is a vast area of flooded sub-tropical grassland, mangrove and cypress swamps, forested “hammocks,” and hundreds of islands that support profusions of water-birds and wildlife.

The first **solar eclipse in 2012** was an annular solar eclipse on May 20–21. I went to Page, Arizona with the Curtis Family to view it. Below are pinholes during the eclipse.





While we were there in Page, we visited a couple valleys that show examples of the world's best toadstool "hoodoo" formations. "Higher resistant boulders left behind from erosion".

Later, very near Page, I visited the spectacular "**Antelope Canyon**". This little-known sandstone canyon, (on the Navajo Reservation), is a natural work of art where light, color, and shape intermingle in an awesome display of exquisite beauty that changes throughout the day. The canyon is a narrow crevice with wild, undulating contours and hollows that range from two to five feet wide and up to 164 feet deep. The effect of light playing on the canyon walls is

staggering. Strong orange and yellow colors brighten the upper reaches, but as the light diminishes, the lower walls turn to shades of purple and blue.



Summer of 2012, I took a road trip to South Dakota.

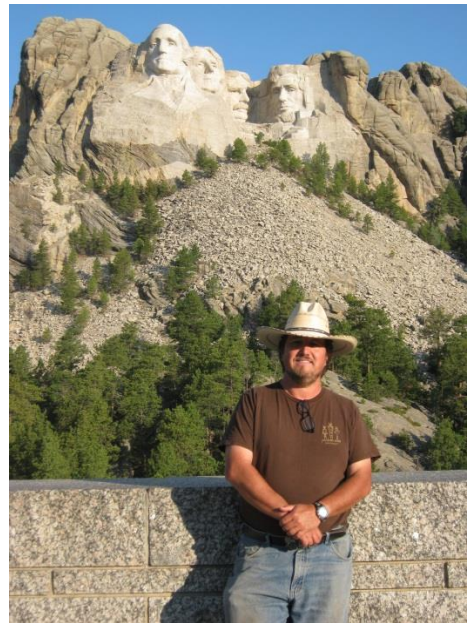
Below is an image of me, west of Devil's Tower in Wyoming. Formed from volcanic lava thrust up through the underlying bedrock, it can be seen from over 100 miles away. It was formed about 50 million years ago when hot, molten magma cooled, contracted, and formed vertical rows of hexagonal columns.



After spending time at the Little Bighorn Battlefield National Monument, I spent some time over at the **Badlands National Park**. This extraordinarily eroded landscape contains a profusion of buttes, pinnacles, and spires carved out of an underlying plateau of soft sediments and volcanic ash. The Badlands sediments were deposited in layers beginning 75 million year ago when shifting continents raised the Black Hills to the west. Sand, silt, and clay measuring thousands of feet deep were then deposited on the plains, along with several layers of volcanic ash, until 5 million years ago, when the White river began eroding to gradually reveal the stark landscape we see today.



While traveling in the Black Hills I visited, "**Spearfish Canyon**", (Below on the left). The Canyon cuts through the Black Hills of South Dakota, and has 17 side gulches that preserve much of the pristine beauty of the landscape. As Spearfish Creek twists and turns through the canyon it reveals one beautiful vista after another. Tributaries flow into the creek, but some don't erode down through the sediment as quickly as the main stream and so become hanging valleys, their water plummeting as a cascade, like the lovely Bridal Veil Falls below.



On the right, above, you'll notice that I visit Mount Rushmore National-Monument.

Becky and I visit Australia and New Zealand for my Birthday and for the Total Solar Eclipse of November 14, 2012. Below is an image of Becky viewing, with filter-glasses, the Solar Eclipse near Cairns, Australia.



Below, we visited an area of rugged mountains and mangrove forests, filled with deep gorges, fast-flowing rivers, and numerous waterfalls. The combination of fringing coral reefs and rainforest coastline at **Cape Tribulation**, (on the right), is unique in Australia. **Daintree National Park**, (on the left), contains many examples of ongoing ecological processes and biological evolution, including exceptionally high levels of species diversity and uniqueness, reflecting long-isolated ancient habitats. The site also reflects eight of the major stages in the Earth's evolutionary history including the ages of pteridophytes; conifers and cycads; angiosperms or flowering plants; the final break-up of Gondwanaland; the mixing of the wildlife and habitats on the Australian and Asian continental plates; and the impact of the Pleistocene glacial periods on tropical rainforest.



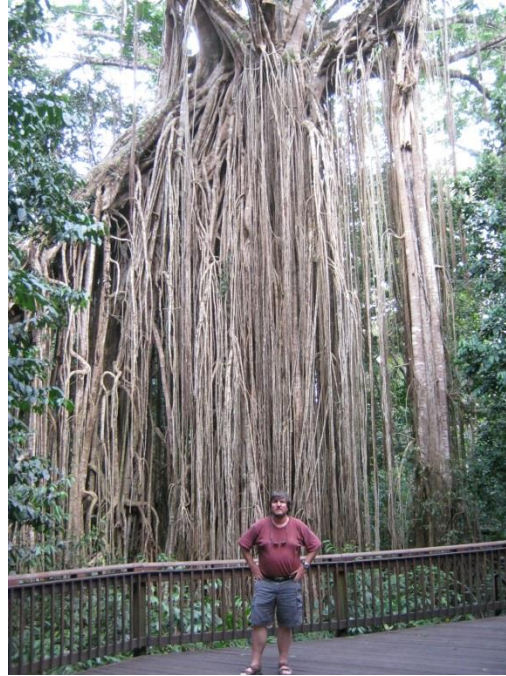
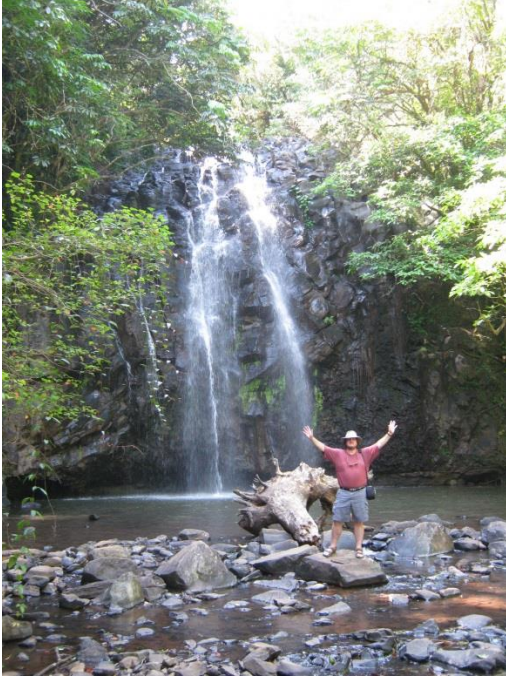
Below, Becky and I snorkeled on the, "**Low Islets**". The Low Islets is a group of two small sand cay islands 8 miles off Port Douglas, in the northern **Great Barrier Reef**. This idyllic coral cay is one of 300 that are created when the low-lying flat reef is above sea level. The main islet's is sheltered from the powerful southeastern swell that breaks in violently on the outer ribbon reefs. The corals of the islets are exposed by the tides. We viewed an abundance of coral fish species and flying fish. Becky is wearing suite that protects her from the extremely dangerous box jelly fish found in the area.



Later, Becky and I visit the “Barron River Falls and Gorge”, (below). The Barron Gorge is a rugged and hilly region lying approximately 19 miles northwest of Cairns. The wild rainforest valley contains, (right), contains diverse and unique ecosystems. The historic Kuranda train and the Skyrail cableway provided Becky and I with spectacular views of the gorge and the Barron Falls, (on the left).



Powered by its headquarters in the Main Coast Range, the **Mossman River** has created a deep, steep-sided gorge in its flow to the sea. Located at the southern end of Daintree National Park, the gorge features a cool mountain stream, gringed by primeval rainforest and strewn with giant granite boulders along its banks. Here, **giant fig trees, (right image)**, crowd each other and dense canopies of the rainforest block most light. Ferns and orchids live among the highest trees to seek out the sunlight. Nearby is Australia’s highest mountain, Bartle Frere. When not cloaked in mist and cloud, the summit fo Bartle Frere offers the chance to view the coastal lowlands and the Atherton Tableland. However, this wilderness area---and its associated **Josephine Falls**--- are subject to extremes of cold, wind, rainfall, and leaches, (left image).



On our way back to the United States, Becky and I visit New Zealand for a week.

Below we visit the North Island, where Becky's Aunt Jeanne and Uncle Richie Coles live near **Mount Taranaki**. The elegant volcanic cone of Mount Taranaki ---formerly Mount Egmont--- stands alone amid the near-circular remnant of a native forest. Taranaki is dormant for now, but its 120,000 year life has been violent and changeful. It has erupted 8 times in the past 500 years---the last occurred 250 years ago---and volcano experts say it will certainly do so again. Uncle Richie died of cancer within a year of our visit. It was a pleasure to see him one last time.



Uncle Richie will be sorely missed. Above are images taken at their ranch-house.

(Below left) Becky and I toured **Tongariro National Park** in the center of New Zealand's North Island. A place of herb fields and forests, lakes and deserts, it is also home to some of New Zealand's rarest native fauna. But the verdant tranquility above ground belies the molten chaos below, and the park is known for its trio of andesitic volcanoes---Tongariro, Ngauruhoe, and Ruapehu---the latter two ranking among the most active composite volcanoes in the world. Ruapehu is a massive complex stratovolcano that cradles an acidic crater lake in an active vent near its summit. Built up from lava and tephra eruptions over the last 200,000 years, it still carries the remnants of receding glaciers. While we were there, Ruapehu erupted spectacularly, sending clouds of ash and steam skyward and covering the surrounding snowfields and forest with a thick film of ash. We were evacuating the area, with the film crew of the "Hobbit", when it exploded.



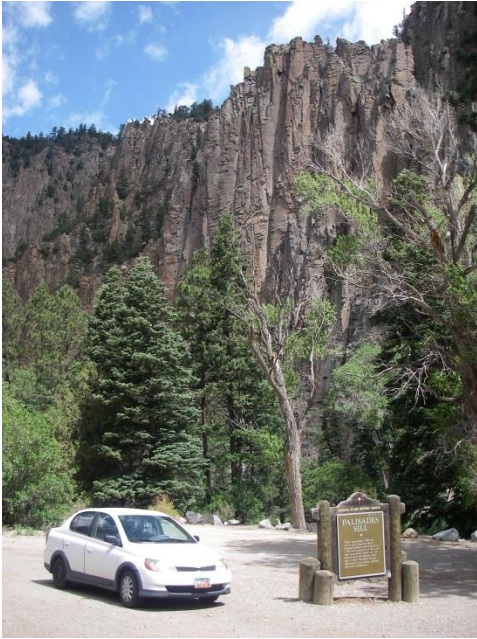
(Above right) Deep beneath New Zealand, two giant tectonic plates, the Pacific Plate and the Indo-Australian Plate, are in colossal struggle. As the Pacific Plate grinds 63 miles below the surface, it creates enough friction and heat to melt itself, turning into magma. At that temperature, magma starts rising through cracks in the plate, meeting cold ground water on the way. Becky and I visited that turmoil at **Rotorua** where more than 1,200 geothermal features---geysers, hot springs, mud pools, fumaroles, silica terraces, and salt deposits.



For Spring Break 2012, we visited the beautiful Blanchard Springs Cave in Arkansas while staying at Eureka Springs. We also spent time at Branson, Missouri.

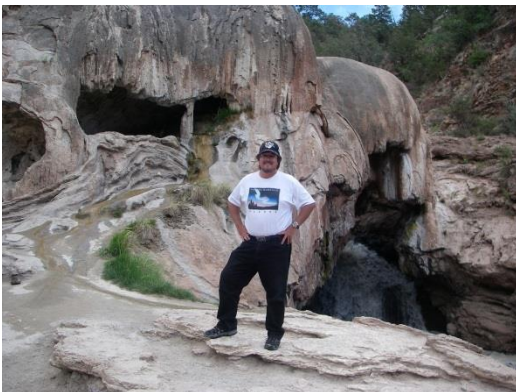
June 2012, I was invited to the McDonald Observatory, Texas to see how they discovered a great number of Exoplanets. While my road trip there, I visited a few spots along the way.

(Below left), My little car is taking a break at **Cimarron Canyon**. The high cliffs extend horizontally to form a palisade above the canyon, something akin to the battlements of an old castle. A sparkling river runs through the canyon for 12 miles, adding to a soothing element.



(Above right), **The Blue Hole** is a huge 130 foot deep natural artesian spring formed within a limestone chasm. Its diameter is 80 feet at its surface. So there is ample room for me to take a plunge in its cool waters, at 64°F. Blue Hole is near the town of Santa Rosa, New Mexico, and is just one of several spring-fed lakes and clear mineral springs that abound there.

(Below left) **The Soda Dam** looks like a giant rock that tumbled into the Jemez River. However, it started forming one million years ago when water from hot underground springs reached the surface and cooled, leaving a thick mineral deposit of calcium carbonate, or travertine. This deposit has since grown, and now forms a 320 foot long limestone structure in New Mexico.



(Above right) **Shiprock Peak** is a solidified basalt lava core of a 30-million-year-old volcano. Its main peak rises an impressive 1,968 feet above the New Mexican plain. The smaller surrounding pinnacles were once the auxiliary vents of the volcano. Shiprock Peak is part of both the Navajo and Chuska volcanic fields that cover northeastern Arizona and northwestern New Mexico.



(Above) The **Bandera Volcano** is New Mexico's "Land of Fire and Ice". The deep cone is the remnant of a violent eruption which occurred around 10,000 years ago, and the volcano's lava tube cave system was once a labyrinth of natural pipes over 19 miles long. Today I visited much of the complex that has collapsed. My walk up the lava trail through the gnarled and twisted juniper, fir, and Ponderosa pine led me to a partially collapsed lava tube and a **natural ice box**.



(Above left) In the heart of the Tularosa Basin in the southwest of New Mexico lies a desert of glistening white dunes. Unlike sand dunes, which are composed of silica, the White Sands are dunes of gypsum. The origin of the gypsum (calcium sulfate) is Lake Lucero, an ephemeral lake to the west of the dunes. **The White Sands National Monument** covers 275 square miles.

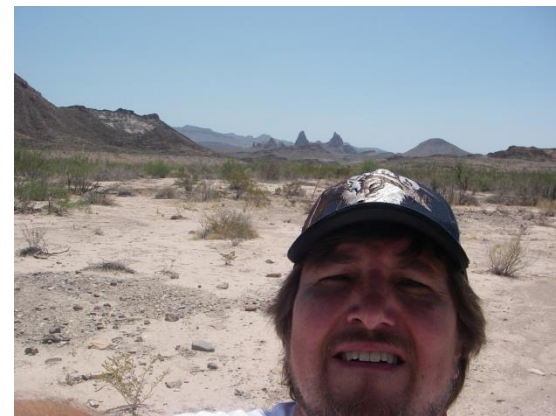
(Above right) Between 1,000-1,500 years ago, a series of fractures opened on the floor of the Tularosa Basin and released thick flows of lava, thus forming a huge, black, primordial-looking terrain. In the **Valley of Fires** it reached a thickness of 165 feet and buried everything in its path, apart from a few sandstone hills that jut above the lava surface like misplaced islands. This was a good place to see the different rock formations that lava can make as it flows and cools. In some places the rock is rough and sharp, in others the surface has a smoother, ropy texture created by lava with more dissolved gas in it.

(Below left) **City of Rocks State Park** is a small----only 1 square mile----but utterly fascinating geological wonder composed of large, naturally-sculptured rock columns and pinnacles 40 feet high. These rocks are 35 million years old, and are volcanic in origin. They were originally part of a very large flow of hot volcanic ash, or tuff, which surged over the area and then, because of its high temperature, became welded into a stratum of rock. The park is located 26 miles northeast of the town of Deming, in scenic Mimbres Valley of the Chihuahuan Desert, in southeastern New Mexico.



(Above right) I spent the day at Carlsbad Caverns. It is a vast network of caves within the Guadalupe Mountains of New Mexico. These large and deep caves are decorated with spectacular limestone columns, stalactites and stalagmites. The caverns are the hollowed-out remains of a fossilized reef from the Permian age 250 million years ago. Once under a shallow inland sea, when the area was uplifted a few million years ago, rainwater seeped into cracks in the reef while hydrogen sulfide gas seeped up from vast underground oil and gas deposits; this combination was extremely corrosive and created the giant caverns I that I saw.

(Below right) The **Basin of the Chisos Mountains** is part of a great rift valley that stretches from Colorado to Mexico. The basin and its mountains sit in a sunken block in the rift, surrounded on either side by more mountains. The result of this geological convolution is a land of contrast---of desert lowlands and moist mountain woodlands. Here I'm taking a selfie towards "Mules Ears Peak" in the **Big Bend National Park** in west Texas. Here the Rio Grande River takes a wide curve across the great Chihuahuan Desert.



(Above Left) I visited the VLA (Very Large Array) Radio Telescope in central New Mexico. This is an observatory that receives radio electromagnetic radiation from the far off regions of the Universe. All the dishes point at the same object for resolution purposes.

August 2012 Becky and I go on a vacation to the California Coast.

(Below left) **Mount Lassen** is almost entirely encircled by the remains of Tehama, a huge volcano that erupted about 350,000 years ago. Lassen arose to relieve geological pressures that are still present, and last erupted in 1915. Lassen is part of the High Cascade system and is a kingpin of Lassen Volcanic National Park, which contains pointed dunes, mud-pots, gas vents lava flows of various types, and a variety of volcanic cones.



(Above right) Becky and I visit **Crater Lake National Park**. It consists of a Large hole, created by the fierce volcanic collapse of a multi-cratered summit called Mount Mazama over 7,000 years ago. Today the crater is filled with a tranquil lake, but pushing up from its waters is a lava and ash cone---Wizard Island--- a reminder of what could lie beneath, and another island---Phantom Ship with rocky pinnacles and skeletal trees. Crater Lake also sits in the Cascade Range.

(Below right) Becky and I stayed at a small resort near Point Arena. The image shows Becky posing in front of the Point Arena Light House. The location was full of beautiful sea arches.



(Above left) I'm standing on a collection of giant spherical concretions near the San Andreas Fault. Caused by tension generated as the Pacific plate moves northwest relative to the North American plate, the fault is a zone of crushed and broken rock a few hundred feet wide. Minor shocks are very frequent. The 1906 San Francisco earthquake involved a 21 ft. displacement.

(Below) Redwood trees are members of the yew family, and are probably the largest living things on Earth. California's unique coastal climate of fog and rain helps these enormous trees grow to great heights. As you can see below, I'm tiny compared to the trunk of one that is probably 350 feet high and 23 ft in diameter. Our resort was within 40 miles of the Redwood National Park.



During Thanksgiving Break, Becky and I traveled to Santa Fe, New Mexico.

One of the most interesting images I captured was of the stair case in a Catholic Church there. Notice that it has no central beam for support. This is truly an amazing architectural feat.

