H-HRFATES

How the Continental Divide shapes Montana's weather, landscape, economy, and culture. By Eric Heidle

n September 30, 1911, a small knot of people wearing their Sunday best stood in a mountain meadow on Mullan Pass, 12 miles west of Helena. They had built a large bonfire and watched as a small airplane approached from the east. Craning their necks, they could clearly see the pilot. One young woman clothed in her finest Victorian dress and hat would later remark, "It was the most wonderful sight I'd ever seen." Her name was Margaret McDonald, and she was my greatgrandmother.

Margaret was right to be amazed. The bonfire had been built to guide the plane,

which had no elecnavigation. tronic Built on a wood-andcanvas frame, the aircraft strained to reach the altitude necessary to cross the 5,900-plus-foot pass. The pilot, a 19-year-old Ohioan Cromwell named Dixon, would earn a \$10,000 prize for his feat of derring-do.

Because this was no ordinary flight over the Continental Divide; it was the very first.

The Continental

Divide has been shaping fortunes in Montana for a long time, but to get to the beginning you have to go back about 60 million years. Deep beneath the North American continent and unusually far inland, a massive tectonic subduction plate began diving under remnants of an older mountain range, pushing up a vast, high plateau like a giant foot furrowing a rug. Erosional weathering and glaciation gradually sculpted this plateau into the Rocky Mountains, and along it an invisible line that literally divides the continent.

WATER GOES EITHER WAY

A continental divide is the line along which



HISTORIC FLIGHT Above: Ohioan Cromwell Dixon, age 19, lands his woodand-canvas biplane near Elliston on September 30, 1911, after departing Helena. This was the first flight over the Continental Divide. Facing page: In the Bob Marshall Wilderness, roughly 100 miles northwest from where Dixon made his historic crossing, the Chinese Wall stands as one of the Divide's most striking geological features.

all water on one side flows to one ocean, and all water on the other flows to another. The Continental Divide running through Montana actually extends from the tip of Alaska to the bottom of South America, the Rockies and Andes separating the waters flowing to the Pacific and the Atlantic. It's easy to imagine these massive watersheds being split by the mighty elevations of Montana, Argentina, and...North Dakota?

That's right. Although the Peace Garden State's high point is below 3,000 feet, a continental divide splits it in two lengthwise. Called the Northern or Laurentian Divide, it sends waters either north into Hudson Bay via Manitoba or south into the Gulf of Mexico by way of the Missouri River. The subtle contours of every landscape must send water somewhere, and there's always a divide.

The Laurentian Divide connects to the Continental Divide in Montana atop a minor nubbin of rock in Glacier National Park. Triple Divide Peak is small by Glacier's standards, but stand at its summit and pour a bit of water at your feet and the fluid could conceivably trickle its way to the Pacific, the Arctic, or the Atlantic. Called a hydrologic apex, these spots are generally regarded as the high point of all drainage basins on each continent-the Mount Everests of water.

Divides go where they will, and Montana's in particular zigzags, generally north to south. But it takes some hard turns. The Continental Divide lassos Butte into a little corner of the Pacific drainage, for example, while Dillon,



which sits south and ever so slightly west of Butte, actually drains to the east. This turn in the Divide also sunders Opportunity (which drains east) from Wisdom (which drains west). Traversing this serpentine boundary, a person driving I-15 between Helena and Idaho crosses the Divide three times.

CLIMATE CHANGER

The Divide cleaves more than watersheds. It separates much of Montana's weather, vegetation, industry, economies—even culture.

Above the Divide, Pacific air masses move east until they strike the Rockies, then rise and cool to drop rain or snow onto the state's mountainous west. This moisture hoarding creates vast forests and complex river systems benefiting downhill skiers and bull trout. The forests and mountains sustain logging and mining.

East of the Divide, after the clouds are wrung dry, farmers, ranchers, and fish make do with less. Here cattle grazing and dryland farming rule—except where irrigation brings water directly to crops and pastures.

While water flows downhill, Montanans are increasingly moving uphill. West of the Divide, people are drawn to skiable mountains, trout-rich streams, and postcard vistas of snowcapped peaks. Our population centers have been drifting westward and uphill toward the Divide in response. Fortunately, Montana maintains a coherent identity despite having such a literal geographical division. While a rancher in Ekalaka might have little in common with a social worker in Missoula, both pride themselves on their identity as Montanans.

The Divide has shaped man-made boundaries for longer than Montana has been a state. In 1803, President Thomas Jefferson sent James Monroe on a boat headed for France to join America's foreign minister Robert Livingston in Paris. Their mission? To haggle with Emperor Napoleon Bonaparte for French lands east of the Mississippi River. The duo was authorized to spend up to \$10 million for New Orleans and as much of Florida as they could obtain. By the time Monroe reached French soil, though, Livingston informed him that a lot more was

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CONTINENT CLEAVER Above: The Continental Divide as it runs from Alaska into South America. Below: A sign near Lincoln marks where Meriwether Lewis crossed the Divide on his return voyage.



up for grabs—the entire Louisiana Territory.

Comprising most of the land between the Continental Divide and the Mississippi River, Louisiana Territory was enormous. Acquiring it would double the size of the United States, secure river access to the continent's interior, and stave off encroachment from European powers. But Napoleon's asking price was half again as much as the Americans' \$10 million budget. Monroe and Livingston gave thoughtful consideration to this new offer, then did what any pair of free-wheeling employees with an expense account and no way to call the home office would do. They agreed to the emperor's price and bought it all.

The Louisiana Purchase was the land deal of the century, and it made the Continental Divide the far western border of the United States. Keen to learn what his men had blown all that money on, Jefferson organized an expedition to seek out a water route to the Pacific. The journey would be led by Captain Meriwether Lewis and Lieutenant William Clark.

Lewis and Clark notched many firsts for European Americans in what would become Montana, including crossing the Divide. Lewis and three of his men did so by reaching Lemhi Pass (50 miles west of Dillon on what became the Montana-Idaho border) on August 12, 1805. There the Corps of Discovery descended west into the territory of Sacagawea's people, the Shoshone Indians, where they discovered vital-and tastyproof they'd crossed the Divide.

Fishing was of keen interest, both for scientific knowledge and keeping bellies full, and the corps had sketched and eaten its way up the Missouri River from St. Louis. But once across the pass, Lewis and Clark got their first taste of a species they'd found nowhere else on their journey: salmon, a major food source for the Shoshones. Lewis quickly surmised that they'd crossed a key divide and were now close to reaching their westward waterway to the Pacific. Clark and a few men tried to follow the tumultuous Salmon River farther downstream, nearly drowning in the attempt. So the expedition returned back east over the Divide on the Shoshones' advice. They made their way north along the Bitterroot, eventually crossing the Divide again, this time at Lolo Pass, to reach the Columbia Basin.

LONG WALK

As dawn breaks on a recent summer day, I am standing atop Logan Pass in Glacier National Park surrounded by some of the most stunning mountain scenery anywhere on the Divide. It's also a parking lot. I'm watching a line of extremely fit runners disappear north along the Highline Trail. Following the Divide much of the way, they don't plan on stopping until they reach Canada, some 38 miles off. I'll beat them there—but by a saner route. I've been recruited to drive the shuttle van around to Waterton Village in Canada's Waterton-Glacier International Peace Park.

First I take in the view. Peaks vault upward in all directions, mountain goats and bighorn sheep stroll casually by, and above me the Divide runs atop the razor-sharp arête of the Garden Wall, slicing the park and eventually a continent in two.









HIKING THE DIVIDE Clockwise from top left: Looking down at Hidden Lake in Glacier National Park just west of the Divide near Logan Pass; a marker at Lemhi Pass on the Idaho-Montana border in southwestern Montana shows where Lewis and Clark first crossed the Divide in 1805; a hiker passes a Continental Divide Trail (CDT) marker at Lewis and Clark Pass; descending Triple Divide Pass on the CDT above Atlantic Creek in Glacier National Park.

The Highline Trail is one end of a much longer walk. Recently, while descending Rogers Peak near Lincoln, I met three backpackers moving quickly south. I asked how far they were going and one replied, "Mexico." They were through-hiking the Continental Divide Trail, a 3,100-mile route from the Canadian line to the Mexican border. Each year hardy adventurers walk its length before winter snows close in. But the most historically significant trail aligned with the Divide is found some 30 miles east—on the edge of the Great Plains.

Called the Old North Trail, it's one of the world's oldest human tracks. Begun at the end of the Pleistocene glaciers' retreat, it's been traveled for perhaps 12,000 years. Prehistoric sites, artifacts, and oral traditions point to its continuous use during that time; the Blackfeet tell of walks lasting a year to lands of "darkskinned people," perhaps in the American

Southwest or even Mexico. And they did it without CamelBaks or graphite trekking poles.

MISSING TREE

The forces that directed early peoples' movements—gravity, temperature, and geology—also shaped the Divide, and continue to shape it today. Even trees can play with our perceptions of where the true line lies.

In 1982 Margaret McDonald, who by then was 92-year-old Margaret "Maggie" Davis, happened to see Helena artist Robert Morgan's painting of Cromwell Dixon's flight across the Divide—and she had a quibble with it. The terrain didn't match her memory of a giant, lone pine at the edge of the meadow where Dixon landed. A reporter at the Helena *Independent Record* got wind of this and brought her, Morgan, and another eyewitness, rancher John Senecal, up to Mullan Pass to see if they could locate the true site.

The tree is clearly visible in one of the 1911 photos, but at first the group couldn't find it. Morgan began strolling back into the timber for a closer look. About 50 feet in, he found the massive pine. An entire forest had grown up around it in the intervening decades.

People have been discovering and rediscovering features of the Continental Divide for ages. This vast geological feature continues to exert its pull on our lives and imaginations. It shapes landscapes, fuels livelihoods, sparks a sense of wanderlust, even lodges in our memory. It's a golden spine that snakes through our state and knits it together, despite its name. We Montanans could be forgiven for calling it, simply, the Greatest Divide.

Robert Morgan's painting of Cromwell Dixon's historic flight is on permanent display in the Helena Regional Airport lobby.