Montana

Pics of Placer Club, circa 1920

Interior

953-297

-298
pics of
excursion boats (motor launches) of 1910s-1920s

Teddi's family museum @ Gates of Haliv: call May 17 to see if they're open on 19th.

957.390
957.391

947-564
947-575

Pac 9554
Missouri River

√ 947.545
955.159
 pics of Fort Assiniboine - general layout
--black cavalry stationed there
--Lt. John J. Pershing

946-913
- 915
- 921
- 943
- 947

946-918

caption 946-947
to be researched: MHS

city directories and newspaper file: the Zanzibar
to be researched: MHS

city directories: "music academy", or what?
PNQ 55, Jan. '64, pp. 9-15

"The Montana Woman Suffrage Campaign", by Ronald Schaffer
Lansing, Capt. Gerald W.

Papers, 1904-1918. 23 items.
Army officer in the 2nd infantry, Montana Nat'l Guard. Papers pertaining to his career, 1904 to 1918.
Anderson, Capt. Orville L. 1892-1918

Diary, 1917-18. 1 vol.
Infantry officer killed in action, Aug. 1, 1918, in Battle of Aisne-Marne, France.
Diary of war experiences from Jan. 1, 1918, to July 25, 1918.
to be researched: MHS

--The Klan in Montana, 1910s-20s
- Brian thinks they have a new collection
McCorkle (sp?) papers at Mont. His'1 Society, for Bucking the Sun--
1920's leftwing politics (Christian Socialist) in Montana

(recommended by Dick Hargesheimer, Dorothy Bradley's press sec'y? or Bill Lang?)
-- bylaws adopted '85; Granville Stuart prez; annual meetings always in Miles City
-- '86, ran for NY Mayor @ age 28(?)
Holter

When was Holter Dam built?

Would the Missouri be backed up, lakelike, at Gates of the Mountains in 1924?
Helena: hospital where Monty would have been taken?
Helena newspapers of 1924: Herand and Independent?
from some point on WW land, can the Black Eagle stack be seen? (exist in '24?)
Helena, summer 2002: summer thunderstorms--where do they come from? If Susan "checks to the West" to see if the rain will last, what mountain or other geography would she be looking at from Highland St?
go through every scene from "colored person's" point of view

(i.e., wd JJ & Yancey be going to the Natatorium? Segregated pool?)
Montana

area of L&C Camp Disappointment?
Montana

Lower Two Medicine Lake, for geography & feel
Montana

Ft. Assinboine geography

--check over my version right after seeing it
to be researched: MHS

**pics & maps of 1920s Helena**

--did Highland St. exist?

--Zanzibar Club? Clore St.?

--capitol bldg? 1900s (1906). Interiors.
  
  Completed 1902.

953-152 Exchange Saloon, 101 S. Main
The Black Infantry in the West, 1869-91  Arlen L. Fowler
W. Sherman Savage

Blacks in the West
Kenneth W. Porter

The Negro on the American Frontier
service. Finally, twelve General Electric articulates were purchased immediately after World War II when the deal to sell them to the Soviet Union fell through. These were called "Little Joes" by the railroad employees, named for Joseph Stalin. The electrics owed the Milwaukee nothing when the electric system was abandoned in 1973, just in time for expensive diesel fuel.

Despite its many improvements the Milwaukee Railroad in Montana was not without its problems. There were none more serious than the earthquake on June 28, 1925. The epicenter of the quake focused upon Three Forks and Manhattan, but the damage was widespread in White Sulphur Springs as well. It was felt in a wide area, bringing people out of their homes and businesses throughout Montana.

The courthouse and school were substantially destroyed in White Sulphur Springs, several buildings in Three Forks and Manhattan were leveled by the quivering earth and the following aftershocks. Damage was estimated to be in the hundreds of thousands of dollars, ranging from cracks in the plaster of the capitol building at Helena to the crumbling of several brick buildings in the towns along the front range of the Rockies. Newspaper accounts were often in conflict because all telegraph services were disrupted in the affected areas.

An avalanche followed the earthquake at Lombard, sliding tons of the mountainside into the Missouri River, blocking the trackage of the Northern Pacific there. But the damage to the Milwaukee in the canyon was added to the financial railroad operating in a depressed economy. The tunnel at Deer Park was closed, an avalanche there dammed Sixteen Mile Creek, and continuing aftershocks frustrated the first attempts at keeping the lines open.

The sleepy village of Deer Park, home to a section foreman, was isolated from the rest of the world while the rising waters of

David Shearer, wife, and family camped at the construction camp at Sixteen, Montana, in 1907.
the creek swirled about it. Sixteen Mile Creek was also dammed by the force of the earthquake. Torrential rains followed the 6:30 p.m. shaker, creating even more problems for the shorthanded crews. It was soon apparent to all that there was no way to temporarily fix what nature had destroyed. The stream became a roaring torrent filling the avalanche created dam with sixty feet of water. The bridges and tracks were under water within hours after the first shocks.

When daybreak revealed the damage, tons of rock had slid into the canyon bottom. The rains unloosened fragile soil conditions and continued to tumble into what had been a creek but now a growing body of water. There was little that remained of the original trackage.

The Milwaukee's first estimates of damage totaled a million dollars. This was soon revised to total a million, five hundred thousand dollars.

Twenty miles of the canyon trackage were destroyed, and while fifteen hundred men went to work repairing it, the Olympian and the Columbian were rerouted over Northern Pacific tracks from Miles City to Sappington. Freight trains were detoured over the Great Northern. What was originally thought to be a one week job became one that consumed the entire summer of 1925.

The resulting lake created its own kind of problem. Deep sea divers were brought into the task from Seattle. Their assignment was to reopen the channel along the creek bed, draining the impounded water. Weekly newspapers from the affected communities of White Sulphur Springs, Three Forks, and Manhattan reported that workmen of every nationality were soon dispatched to the scene. Lombard served as headquarters for the damage repair task. The Northern Pacific had its own landslide to
repair at that site.

A shoe fly was built around the mountain at the Deer Park tunnel. This was temporary trackage alongside the mountain. The tunnel had suffered enormous damage and the shoe fly was a temporary passage while tunnel repairs were made.

The embattled railroad, already beset by financial problems, pulled the throttle on the repair work. The tons of rock and earth that had collapsed into the creek were removed and hauled away, the rails were relaid, bridges were rebuilt, and the tunnel at Deer Park was essentially reexcavated. The telegraph system that paralleled the Milwaukee was restrung as was the electrification system.

The damage estimates grew as time passed during the summer. The theater, school, bank building, and telephone exchange were all ultimately condemned and demolished in the interest of safety in Manhattan. Three Forks witnessed the destruction of its school, the Methodist church, and both of its banks, the American National and the Labor National banks.

A massive crack appeared between the two towns that ranged from two to five inches wide with a depth of up to five feet. There was no such a thing as a Richter scale at the time, but a professor of geology at the University of Montana, Dr. C. D. Clapp, explained the phenomena with stories that were carried by all of the state's newspapers. "It was a slippage of the earth, a common thing along the Rocky Mountain front."

A total of forty-one shocks were felt during and following the major event on Saturday, June 28th, 1925. The area has long since been recognized as one of growing mountains and occasional severe shocks.

It was considered a miracle that no one was killed in the disaster that struck on that warm summer evening. The mines at Butte and Jardine were shaken but did not collapse. Yellowstone and Glacier national parks were rattled by the earthquake with some avalanche activity following it. But the earth's shaking had more lasting calamitous results on the Milwaukee Railroad than it

Don Baker

Sixteen Mile Canyon, Creek and tunnel
MHS

--Ft. Assiniboine in historic register
Helena earthquake of 1925(?) June 28, 1925
(take this article along for reference)

ftnte 23, p. 31, Montana Mag, spring '02 ("Learning about the weather... by Gary D. Libecap)

US Dept of Commerce, Weather Bureau, Climatological Data, Montana Section, vol 50, #13 Helena, 1947
MHS

Joseph Dixon biog
MHS or elsewhere: Charley Russell pic of bronc bucking through chuckwagon scene
to be researched: MHS

--radio in Montana by 1924? what stations? what programming?

MHS 791.44
M 1461

Voices in Big Sky ...
C. Howard McDonald

0.2-1922, KFBB Havre (moved to GF in '29)
KFBF Butte
KFCA Billings

0.3-1922, KDYS Butte: closed 1923
Bronc in Cow Camp

1897 • 20¼ x 31¼ in. • Oil on canvas

To compare this obstreperous scene with the earlier oils of cowboy life such as Breaking Camp (page 57) from twelve years before, is to find Russell in firmer control of the medium, using a wider and subtler range of color, and with an easier sense of movement in space. And though he still had problems in achieving naturalness and proportion—particularly here with the startled figure to the right—his people are now more convincingly worked into the scene and give less of the effect of being cut out and pasted on. As they move into the distance, too, their forms are softened and corroded by a surrounding atmosphere.

What he was rapidly learning through observation and his artist’s intuition was, in a way, what had to be learned about portraying human reality at the start of the Italian Renaissance (for one big instance)—and notably in the evolving realism of the painter Giotto.

In each case the most important thing was to tell a story believably, with fullest appreciation of the subject. And Russell has had a marvelous time telling this one, with its stageful of entertaining characters: the intensely preoccupied bronc-riding of the expert Bob Thoroughman (Russell’s close friend) as his outlaw horse “Pinto” crashes through the campfire like a bucking tornado; the outraged cook, whose gut response seems unlikely to calm the situation; and the onlookers, either amused or confounded, depending upon where they are vis-à-vis the tornado’s path.

It was one of the many kinds of encounters depicted by Russell’s storytelling gifts—visual or verbal—and he painted its comedy in many variations.
Dear Brian--

Just another dab of early warning, in case it’s helpful to you to know some of the items I’ll be pestering you for when Carol and I hit the library on June third and fourth and maybe the morning of the fifth. Here, sir, is the kind of thing I’ll be trying to sop up for my next book:

--Helena newspapers or any other source on the effects, particularly in Helena, of the June 28, 1925 earthquake epicentered in the Three Forks-Manhattan area. My reference on this is *The Montana Railroad: Alias the Jawbone*, by Don Baker; he describes the damage done to the Milwaukee railroad in the Sixteen Mile Creek area, but also cites “cracks in the plaster of the capitol building at Helena.” And is my memory right that there was also a 1935 earthquake? If so, I’d also like to see sources on that.

--Any historic register stuff you have on Fort Assiniboine.

--Something cited in Gary Libecap’s nifty dryfarming piece in the Spring ’02 *Montana* issue (liked your piece, too; I did a college term paper on the history of the magazine) in his footnote 23, p. 31, if you have it: US Dept. of Commerce, Weather Bureau, *Climatological Data, Montana Section*, vol, 50, no. 13--I’m interested in rainfall data for north-central Montana, roughly the triangle from Great Falls to Havre to the Rocky Mountain Front, 1924-25.

--That pamphlet or booklet or whatever it is on early radio in Montana, *Voices in the Big Sky*, Howard McDonald, call no. 791.44 M146v.

--Helena city directories, 1924-25, although I think I can beeline to them myself unless you’ve moved ‘em.

--A question: what Helena newspapers existed in March, 1924?

--Got anything about Teddy Roosevelt attending Montana Cattlemens’ meetings?

--Lastly, I need to take a look at that Charley Russell pic of the horse bucking through the roundup grub-call--*Bronc for Breakfast*, is it? I suppose a CMR collections book would have that?

By the way, I’m still packing a portable typewriter on research gigs, if you need to set me up where I won’t drive your other patrons nuts. Looking forward to catching up with you and the library once again.
With local and minor exceptions, the lands beyond the hundredth meridian received less than twenty inches of annual rainfall; and twenty inches was the minimum for unaided agriculture. That one simple fact was to be, and is still to be, more fecund of social and economic and institutional change in the West than all the acts of all the Presidents and Congresses from the Louisiana Purchase to the present.

—Wallace Stegner

Beyond the Hundredth Meridian

Abandoned homestead,
Chouteau County, 1930

Optimism ran high in the early decades of the twentieth century as Montanans, including Cascade County’s Greenfield Beach dryland farmers rallying near the Sun River circa 1910 to protest an expensive irrigation project, placed their faith in a new system of cultivation called dryfarming that offered a remedy to drought. Touted by virtually every Montana organization supplying information about farming conditions in Montana, dryfarming proved inadequate to counter the effects of a five-year drought that began in 1917.

Unless otherwise noted, photographs courtesy MHS Photograph Archives, Helena
explain away agricultural deflation nor gainsay the reality that demand for irrigated land in Montana had declined.\textsuperscript{46} In part the association lost momentum for want of new leadership after Locke joined the Dixon administration. Though Locke remained supportive, Republican Party politics and his official duties for the Montana Industrial Accident Board, which he headed until 1927, preoccupied him.\textsuperscript{47} National political conditions also contributed to the organization’s demise: President Harding died in 1923, Calvin Coolidge’s administration sanctioned Mather’s closure policy, and Walsh failed to persuade Congress to override the NPS director. According to Secretary of the Interior Hubert Work, Yellowstone Lake and its environs constituted a “splendid wilderness” that should stay “intact in its natural state.”\textsuperscript{48}

At its demise, no new dams or ancillary irrigation works marked the YIA’s crusade, but a diehard group kept alive the notion of a Yellowstone Lake dam.\textsuperscript{49} About half a decade after the organization’s collapse, Yellowstone County boosters and old YIA activists teamed together to lobby Congress. In 1927 and 1928 Congress enacted laws that permitted but did not require the United States Army Corp of Engineers to dam the lake. Although Calvin Coolidge’s and Herbert Hoover’s administrations prevented the Corps from exercising its new authority, droughts in the 1930s put new pressure on federal and state government. Montana governor Elmer Holt supported a new plan for a dam about four miles upstream from Livingston in 1935 and 1936. Holt, however, could not raise construction funds.\textsuperscript{50}

Nonetheless, Locke and his irrigation movement bequeathed to the next generation a repeatedly revived water plan that proponents presented as an economical way of expanding Yellowstone Valley irrigation. To the dismay of environmentalists, advocates of large-scale irrigation and manufacturers of electricity proposed several reincarnations of the YIA’s old plan in the 1960s and 1970s, and in 1992 a loose confederation of Livingston and Billings commercial interests revived the idea of a Yellowstone Lake dam for irrigation and the production of hydroelectric power. Those schemes floundered like all the others over the past century; meanwhile, drought in the late 1990s and into the new century has revived the phoenix-like discussions of dams on the Yellowstone River.\textsuperscript{51}

HUGH LOVIN is professor emeritus of history at Boise State University, Boise, Idaho. He has written articles about irrigation and arid-land development in the West for the Pacific Northwest Quarterly, Arizona and the West, Annals of Wyoming, and Idaho Yesterdays. In 2001 he presented the paper, “Dreamers, Schemers, and Doers of Idaho Irrigation,” at the agricultural history symposium held at the University of Nevada, Reno.

Multiple factors contributed to the demise of the YIA and its irrigation plan: the loss of Jerome Locke’s leadership, agricultural deflation, declining demand for irrigated land in Montana, and national political conditions that favored preservation of Yellowstone National Park and its features, including the popular Fishing Bridge (below). Gone, but not forgotten, the dam idea has been revived repeatedly in intervening years and remains a threat in the face of record drought that has spanned the turn of the new century.
Homestead failure is one of the most poignant episodes in the history of the Great Plains. In Montana alone, nearly 200,000 homesteaders founded new farms between 1900 and 1921, raising the population of eastern Montana to over 250,000 in 1920; yet, despite high hopes, a severe five-year drought that began in 1917 crippled wheat production and sparked an exodus from the state. Ultimately, some 60,000 Montana homesteaders gave up, and land that once held such promise was taken out of production or auctioned off to pay loans and taxes. The frame skeletons of deserted homes and empty schoolhouses that today dot the Montana landscape remain as testimony to dashed expectations, bankruptcies, and the depopulation of the region.

In the face of this calamity, the puzzle remains why so many settlers moved to a place that turned out to be so inhospitable. After all, drought should not have been a surprise. Earlier in the century the Great Plains were known as the “Great American Desert,” and by the turn of the twentieth century the optimistic notion that “rain follows the plow” had been fairly well discredited. Most historians of the period have assigned blame to railroad propaganda and the gullibility of homesteaders: journalist Joseph K. Howard labeled Montana homesteaders naive fools while historian K. Ross Toole more diplomatically suggested that they were the victims of railroad hyperbole and outright lies. A more likely explanation is that homesteaders were emboldened by advice from agricultural professionals who believed that a new scientific farming method called dryfarming offered a remedy to drought.

Learning about the Weather
Dryfarming Doctrine and Homestead Failure in Eastern Montana, 1900-1925

by Gary D. Libecap
Dry farming doctrine represented the Progressive era’s optimistic belief in the power of practical science to tame nature and bend it to meet human needs. Proponents of “scientific soil culture” predicted that vast areas could be opened for settlement, not only in the United States but throughout the world, and that farmers would grow wheat and other crops in “the natural habitat of cactus.” Dry farming was moving onward to conquer the waste places of the earth, noted John Widtsoe, a dry farming proponent and president of Utah Agricultural College.7

After the turn of the century, the doctrine of dry farming spread rapidly throughout the Great Plains. Although it was common knowledge that eastern Montana could be dry, dry farming advocates claimed that if farmers followed certain cultivation techniques, sufficient moisture could be saved in the soil to pull a farm through any rainless period. “[T]he farmer will always have a crop: in the wet years his crop will be large; in the driest year it will be sufficient to sustain him,” claimed Widtsoe in 1911.8

According to the theory, deep plowing in fall and spring captured precipitation and sent it far into the soil where it was saved for plants, rather than allowing the moisture to be lost as runoff as it would be with shallower tillage. Over time, the saved water percolated upward through capillary action toward plants’ thirsty roots. Cultivating and subsurface packing after every rain prevented the soil from crusting and maintained a protective mulch that kept the moisture from evaporating. Indeed, advocates asserted that too much evaporation rather than too little rainfall was the critical problem in semi-arid regions. Crop failure occurred only if a farmer did not perform the required work, an outcome attributable to an individual’s shortcomings, not to the Great Plains’ climate.9

Dry farming doctrine was attractive to homesteaders not only because it offered a solution to the problem of drought but also because it promised high yields through intensive cultivation, which encouraged the formation of small family farms. There was a strong bias toward small homesteads among advocates, and their arguments were part of the debate over whether and how much the 1862 Homestead Act should be modified to meet the drier conditions of the Great Plains.10 The opportunities made possible through dry farming surely helped limit major changes in land laws. Rather than the 320-acre homesteads recommended for arid regions by John Wesley Powell in 1878, Congress made only minimal adjustments to the Homestead Act, allowing claims of 320 rather than 160 acres in 1909 and reducing the residency requirement from five to three years in 1912.

Virtually every organization supplying information to homesteaders on the Great Plains between 1900 and 1920 emphasized dry farming principles, and many advocates had at least some scientific credentials, which gave their ideas an air of scientific credibility. The most prominent supporter was South Dakota farmer Hardy Webster Campbell. Campbell organized the Western Agricultural Improvement Society in 1895 to promulgate dry farming techniques and wrote a series of monographs on the subject between 1902 and 1916.11 He later supervised demonstration farms for the Northern Pacific and Chicago, Burlington and Quincy railroads and published a journal, The Western Soil Culture. Other prominent dry farming supporters included B. C. Buffin, professor of agriculture at the University of Wyoming and director...
Montana Agricultural Experiment Stations

of the Wyoming Agricultural Experiment Station; Thomas Shaw, professor of animal husbandry at the University of Minnesota; V. T. Cooke, whose work was published by the Wyoming Dry Farming Commission; and F. H. King of the Wisconsin Agricultural Experiment Station.

For eastern Montana homesteaders, however, information about dryfarming came mostly from officials of the Montana Agricultural Experiment Station in Bozeman. Created by the Hatch Act in 1887, agricultural experiment stations provided general information about new crops and products and promoted new practical technologies. The Agricultural Extension Service, established by the

1. Wallace Stegner, Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West (Boston, 1954), 214.


5. Howard, Montana, 181-96; Toole, Montana, 232-34. Similar views of naive homesteaders and overpromotion by the railroads are provided in Malone, Roeder, and Lang, Montana, 288-40; and Richard White, “It’s Your Misfortune and None of My Own”: A History of the American West (Norman, 1991), 142-53.

6. This paper benefits from a larger study by Gary D. Libecap and Zeynep Hansen, “Rain Follows the Plow” and Dryfarming Doctrine: The Climatic Information Problem and Homestead Failure in the Upper Great Plains, 1890-1925,” forthcoming in Journal of Economic History.

Smith-Lever Act in 1914, aided in these tasks. As a part of its outreach programs, the Montana Agricultural Experiment Station set up demonstration farms to showcase new crops, equipment, and dryfarming cultivation practices, and by 1910, thirteen of these farms were conducting dryfarming tests in the state.

To provide farmers the latest scientific knowledge, the Montana experiment station annually organized Farmers’


8. Widtsoe, Dry-Farming, 402.

9. See Hardy Webster Campbell, Campbell’s 1902 Soil Culture Manual (Holdrege, Nebr., 1902), p. 6, for discussion of percolation and capillary action. For more on the key role of capillary action, see Widtsoe, Dry-Farming, 283; and E. B. Parsons, Parsons on Dry Farming (Aberdeen, S.Dak., 1913), 17, 44. See also Webster H. Campbell, Soil Culture Primer (Lincoln, 1914), pp. 66-83, for additional discussion of the principles of moisture storage. Campbell claimed that dryfarming cultivation in arid areas actually could result in yields three times higher than those found in humid areas because nutrients were not leached from the soil.

10. Campbell opposed larger farms, claiming that they were not family farms and were not productive. Campbell, Campbell’s 1902 Soil Culture Manual, 5. Richard B. Roeder discusses Montana promoter Paris Gibson’s emphasis on dense small farm settlement in “A Settlement on the Plains: Paris Gibson and the Building of Great Falls,” Montana The Magazine of Western History, 42 (Autumn 1992), 4-19. See Stegner, Beyond the Hundredth Meridian, 219-42, for analysis of the political controversy over homestead size and efforts to adjust the federal land laws.

11. Campbell’s books include Campbell’s 1902 Soil Culture Manual; Soil Culture Primer; 1897 Soil Culture Manual (Lincoln, 1897); and Progressive Agriculture, Tillage, Not Weather Controls Yield (Lincoln, 1916).
Institutes in most eastern Montana counties. During 1901–1902, the station held 17 institutes, and by 1907, 12,000 farmers had attended 154 such meetings. At Farmers’ Institutes, experiment station personnel assured homesteaders that even in eastern Montana where annual rainfall was about 13 inches, irrigation was “not necessary” in many places and that good crops could be grown through the use of dryfarming practices. During droughts, lower, but adequate, yields could be maintained.  

As part of its effort to educate people about dryfarming, the Montana Agricultural Experiment Station distributed numerous short publications containing specific information about precipitation levels, farming techniques, and crop yields. Essays with titles such as “Cultural Methods Adapted to Dry Land Conditions,” “The Dry Farm Unit,” “Problems of Dry Farming in Montana,” “Attend to the Fallow,” “Dry Farming Principles,” and “Suggestions to the Dry Farm Homesteader” explained what crop types grew best and what new varieties were under consideration, the use of summer fallow, the results of rotation experiments, and provided testimonials from established dryland farmers. Optimistic in their prescriptions for the success of small dryland homesteads, these publications repeated or closely followed the principles advocated by Campbell, Widtsoe, Buffin, and others.

Prospective settlers commonly wrote to the experiment station requesting a variety of information about the availability of land, cultivation practices, the weather (especially rainfall), the capital requirements to start a new farm, and how to locate other sources of information. For example, in a letter dated May 25, 1916, prospective homesteader B. D. Bundy, who had recently arrived in Glasgow, Montana, encouraged dryfarming and even sponsored special agriculture trains to provide instruction to farmers along its route, but for eastern Montana homesteaders, information about dryfarming came mostly from Montana agricultural experiment stations. By 1907, 12,000 farmers had attended Farmers’ Institutes. At left, Professor H. L. Bolley gives a lecture on cultivating flax circa 1914. Below, Montana State College professors demonstrate the treatment of flax seed for farmers in Circle, Montana.

12. Montana Farmers’ Institutes, Second Annual Report (Bozeman, Mont., 1903), 201-3. See also correspondence from the Montana Agricultural Experiment Station to G. H. Carroll, January 5, 1911, file AC-F4, box 1, Collection 00064; M. L. Wilson Files, Plants and Soils, Merrill G. Burlington Special Collections, Montana State University Libraries, Bozeman (hereafter Wilson Files); Montana Farmers’ Institutes, Third Annual Report (Bozeman, Mont., 1904), 197-205; F. B. Linfield, Bulletin of the Montana Farmers’ Institutes: Organization of Farmers’ Institutes and Announcement of Meetings for the Winter 1904–5 (Bozeman, Mont., 1905), 4; Montana Agricultural Experiment Station, Ninth Annual Report (Bozeman, Mont., 1902), 17; Montana Farmers’ Institutes, Sixth Annual Report (Bozeman, Mont., 1908), v.

13. Montana Agricultural Experiment Station publications, 1912-1913, file AF-F6, box 3, file AH-F2, AH-F7, box 4, Wilson Files. Other experiment results from demonstration farms and suggestions for crops and techniques were provided in Alfred Atkinson, “Crop Growing Suggestions to Dry Land Farmers,” in Montana Agricultural College Experiment Station Circular 45 (Bozeman, Mont., 1915), 121-38; and Alfred Atkinson and J. B. Nelson, “Dry Farming Investigations in Montana,” in Montana Agricultural College Experiment Station Bulletin No. 74 (Bozeman, Mont., 1908), 69-85.
tana, posed a series of questions to Alfred Atkinson of the Montana Agricultural Experiment Station: “Do you think a family can make a living on 160 acres of land in Valley Co. Mont? Which would be the best way to farm this land? What rotation would be the best for grain farming on this land? Should it be summer fallowed every other summer or every third summer? Or not at all? Would it be best to use the land for grazing? Would tame hay do well in the dry years?”

In his May 30 response, Atkinson commented: “Replying to your letter of recent date in which you ask my opinion of the possibility of making a living on 160 acres of land in Valley county, [I] would say that I know of instances in the state where very good returns are being made on 160 acres of dry land.” He suggested placing most of the land in wheat and some in alfalfa and offered to send a circular, “Crop Growing Suggestions to Dry Land Farmers,” adding: “You will note the methods of crop management which we recommend.” If the homesteader followed these suggestions and added some livestock and garden “stuff,” Atkinson promised “a pretty fair income.” Similarly, in a 1909 letter Atkinson assured H. H. Kimmey of Des Moines, Iowa, that “as a result of our observations and investigations on the Stations, we are convinced that dry farming has come to stay, and is just as reliable as any other class of farming.”

The Montana Bureau of Agriculture, Labor, and Industry, later known as the Department of Agriculture and Publicity, also provided homesteaders with general information on farming conditions. The agency’s 1906 report declared that in fifteen years of wheat farming in Cascade County there had never been an entire crop failure on nonirrigated farms, although droughts could cut yields in half. Beginning in 1908, the bureau advertised dryfarming as the poor man’s alternative to expensive irrigation provided by federal reclamation projects.

Anxious to draw people to their area, local communities, land developers, and professional homestead locators advertised the advantages of their locale. The Glasgow Commercial Club claimed that the nearby land was “very productive without irrigation and the increased yields by irrigation makes it one of the richest valleys in the world.” Miles City developer E. B. Milburn’s flier “Eastern Montana Farm Lands” summarized the types of crops grown, comparative yields, rainfall, the availability of private and government land, and testimonials from satisfied farmers “who are glad they came to Montana.” Such advertisements were distributed at agricultural fairs and traveling railroad exhibits and published in newspapers, farm journals, and railroad magazines.

Established in 1907 as a regional meeting of dryfarming proponents, the Dry Farming Congress introduced the latest information about dryfarming to thousands of farmers. At the meetings, speakers from throughout the Great Plains, and in some cases from foreign countries such as Australia, outlined the opportunities afforded through dryfarming and discussed new dryfarming techniques and crops. Often leading dryfarming proponents, agricultural experiment station personnel, and local politicians, including the governors of Colorado, Montana, and Wyoming, addressed the assemblies. The annual conventions enjoyed wide appeal with meeting sites including Denver in 1907, Salt Lake City in 1908, Cheyenne in 1909, Billings in 1909, Spokane in 1910, Colorado Springs in 1911, Lethbridge in 1912, Wichita in 1914, Denver in 1915, and El Paso in 1916. Five hundred delegates attended the third congress 1909, and in 1912, the Dry Farming Congress reported 15,000 members.

18. Board of Control, Third Dry Farming Congress (Cheyenne, Wyo., 1909), 9-46.
19. Karl Quisenberry, in “The Dry Land Stations: Their Mission and Their Men,” Agricultural History, 51 (January 1977), pp. 218-28, claimed that 10,000 attended the 1912 Dry Farming Congress in Lethbridge. Other sources claim that the congress had 15,000 members at the time. Board of Control, The Seventh International Dry Farming Congress, 1912 (Lethbridge, Alberta, 1912), 31, copy in file AF-F4, box 3, Wilson Files. Given the population of the region, the numbers are indicative of the movement’s popularity. As a part of their effort, the congress’s leadership lobbied the federal government for funding for dryfarming investigations.
Railroads, such as the Northern Pacific, Great Northern, and the Chicago, Milwaukee, St. Paul and Pacific (known as the Milwaukee Road), were another important source of information about farming prospects in eastern Montana. As every student of Montana history knows, the railroads encouraged the state’s homestead boom by assuring homesteaders that they need not fear droughts. "The fact has been demonstrated beyond any reasonable doubt that the yields...can be greatly increased and often doubled by the intelligent cultivation of the soil, and not only increased in amount but the yield rendered sure," asserted a 1911 Northern Pacific publication. Buoyed by this belief, railroads disseminated fliers and brochures advertising farmers' testimonials and the results of dry-farming investigations throughout the United States and Europe.

Railroads also contributed funding for dry-farming investigations on both private demonstration farms and state experiment stations. In 1905 and 1906 the Northern Pacific Railroad and Great Northern Railway respectively allocated $2,500 and $2,000 for "cooperative tests on dry bench lands." The State of Montana soon joined the railroads in funding these efforts. In 1909 the State appropriated $11,000 for demonstration farms with the Northern Pacific providing an additional $5,000 and the Great Northern and the Milwaukee Road each $2,000. By 1911 appropriations totaled $16,250 and that figure rose to $22,750 in 1913.

But the railroads went beyond the development and dissemination of dry-farming doctrine. Railroad companies used experiment station research to sell Great Plains land through a major advertising blitz aimed at an international audience. In 1914, for example, the Chicago, Rock Island, and Pacific Railroad hired dry-farming authority Henry M. Cottrell, director of the Colorado Agricultural Experiment Station and organizer of the Colorado Farmers' Institutes, to head its agricultural development department and spread word about the availability of fine low-cost farmland. To speed settlement, railroads created immigration departments and provided immigrant trains as a low-cost means of transporting household goods and farm equipment westward. They also provided, at cost, cuttings and seeds for crops such as alfalfa, corn, wheat, barley, and rye that seemed suited to the northern plains. Farmers received free transportation to Farmers' Institutes, and they visited demonstration trains such as the Better Farming Special the Chicago, Burlington and Quincy Railroad sent to sixty-five towns in Montana, Wyoming, South Dakota, and Nebraska in February 1914 to spread the word about moisture-saving techniques.

Dryfarming doctrine and homesteading bloomed together and they jointly wilted between 1917 and 1921. The five-year drought of this period stands out for both the severity of the precipitation shortfall and for its length. The average rainfall in eastern Montana for the thirty years between 1895 and 1925 was a little above 14 inches (see Fig. 1). During the drought years, rainfall fell below 12 inches, far too little for most crops, particularly if dry weather occurred during the growing season, and well below what the United States Department of Commerce's Weather Bureau defined as a severe drought. These statistics illustrate two important points about precipitation in eastern Montana in the early part of the twentieth century: Except for one-year droughts in 1904 and 1910, precipitation through 1916 was at or above average, and, indeed, the period between 1906

20. Northern Pacific Railroad, Western North Dakota: Being a Description of a Land of Great Promise and the Opportunities It Holds for Homeseekers, (St. Paul, Minn., 1911), p. 15, pamphlet, PAM 2097, MHS.
21. Montana Agricultural Experiment Station, Thirteenth Annual Report (Bozeman, Mont., 1907), 109-13; Montana Agricultural Experiment Station, Sixteenth Annual Report (Bozeman, Mont., 1910), 65.
Homesteaders with 160- or 320-acre claims could ill-afford the income shortfall that resulted from a dry growing season. With her finely crafted chairs and curtains, homesteader Rosie Roessler, pictured here with friends on August 31, 1915, exhibits her hard-earned domesticity. Even four years before the drought started making survival tenuous, Roessler walked to the town of Marsh, six miles away, to wash clothes and do other housework to earn extra money.

and 1916 was the wettest of the twentieth century. Conversely, during the five years that followed, the drought was so severe that nothing comparable occurred until the 1930s.

The drought appeared with a dry spring in 1917. Optimism among experiment station officials and homesteaders remained high, however, and farming continued as normal. Dry-farming doctrine inspired confidence that the drought could be withstood, and had it ended quickly, the doctrine probably would have been sustained much longer. Farmers endured droughts in 1904 and 1910 with little hardship, and this experience seemed to validate claims that the new techniques could successfully capture enough water in the soil to carry a small farmer through a drought year. In fact, Montana homesteaders made over 15,000 new land entries in 1917, more than in the previous year which had been much wetter, and settlers continued to arrive through the early 1920s (see FIG. 2).

By 1919, however, many observers, including Montana experiment station personnel, finally acknowledged

23. Rainfall data for eastern Montana, 1895-1947, compiled from United States Department of Commerce, Weather Bureau, Climatological Data, Montana Section, vol. 50, no. 13 (Helena, Mont., 1947), 75. A common designation of a severe drought is precipitation one standard deviation (a measure of variability) below the average.
24. Denton (Mont.) Recorder, September 1, 1919; Montana Agricultural Experiment Station, Twenty-Sixth Annual Report (Bozeman, Mont., 1920), 8. The July 14, 1919, Fairview (Mont.) News said that the drought is "without precedent in the weather records of this state."
25. Montana Agricultural Experiment Station, Twenty-Seventh Annual Report (Bozeman, Mont., 1921), 7; Montana Agricultural Experiment Station, Twenty-Eighth Annual Report (Bozeman, Mont., 1922), 57.

the unpredictability of drought. "Weather conditions beyond the expectation of any student of weather reports the past 40 years in this state have fallen upon Montana," noted the Denton Recorder in September 1919. For the first time, station officials doubted the ability of dry-farming techniques to guarantee a moderately successful crop. In a further shift, by 1920 experiment station publications claimed that drought could be expected "rather frequently," and by 1921, they questioned the effectiveness of dry-farming doctrine. 25

Moreover, the drought cast doubt on the feasibility of small dryland farms. Montana Agricultural Experiment Station director F. B. Linfield claimed in 1924 that the distribution of marginal lands via the homestead acts had been a mistake and that successful farming in dry areas required "two to four times the area of the land named in the National Homestead Acts." 25 Larger farms could diversify into livestock to help maintain income when wheat yields were down, and they could better afford to place land in fallow, which was an effective means of building up soil moisture. Homesteaders with 160- or 320-acre
In a land subject to recurring droughts, irrigation offered a reliable, though by no means guaranteed, alternative to dryfarming. The pamphlet above proposed that irrigation could help alleviate the effects of a drought that was driving the homesteaders off their claims. Below, the Gardiner family poses on hard-used land.
new homesteads declined in 1921 and 1922 and then fell sharply in 1923, never to rebound.

The claim made by most histories of the period that railroads knowingly misled settlers with extravagant claims about dryfarming prospects is incorrect. The railroads were not mere publicists, indifferent to the outcome of homestead migration. The railroads funded scientific research in order to promote the settlement of their service areas and, in the case of the Northern Pacific, to sell land. Rather than duping fools, the railroads hoped to address the difficult conditions of the region and thereby create a permanent population of farmers who would ship and receive goods via their rail lines. The railroads had a stake in successful homesteads. Widespread agriculture failure reduced the attractiveness of the area and, hence, the value of railroad investment in the upper Great Plains. Like farmers, railroads had relied on the limited scientific information about dryfarming prospects and weather provided by the experiment stations. Unfortunately, their information proved to be too incomplete and optimistic for the drought conditions that unfolded between 1917 and 1921.

The legacy of the drought was a more somber assessment by all parties—farmers, experiment station personnel, local promoters, and railroad officials alike—of what it would take to succeed in farming in eastern Montana. Some dryfarming techniques such as the use of fallow were shown to be valuable tools for agriculture in a semiarid region. But all agreed that practical science could only go so far in mitigating the weather of the Great Plains. No longer was it believed that dryfarming cultivation could store enough moisture in the ground to defeat drought. The risks of the region’s climate remained, and farmers would have to adjust to it.

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In the rural West dilapidated houses and outbuildings, weathering and usually forgotten, stand as reminders of how poorly homesteaders understood Montana’s climate. Historians’ claim that railroad officials unscrupulously lured homesteaders to land they knew to be too arid for farming is untrue; farmers, local promoters, experiment station personnel, and railroad officials had relied on the limited scientific information available and the result was a somber reassessment of what it would take to succeed in farming in eastern Montana.
Winter in the Rockies
Winter Quarters of the Mountain Men

by Kerry R. Oman
CHAPTER V

ELECTION RETURNS, "A CASE OF JITTERS"

Joseph M. Dixon was elected governor of Montana in 1920 in an unprecedented landslide. Receiving 111,113 votes, the largest vote ever gathered by a political candidate in the history of Montana, Dixon won over 60 per cent of the total vote compared to Burton K. Wheeler's 40 per cent of the total vote, or 74,875 votes.\(^1\) The Republican vote is even more striking when compared with the 1916 vote of the gubernatorial contest when Sam Stewart received 85,683 votes (53 per cent) compared to Frank J. Edwards who received 76,547 votes (47 per cent).\(^2\) On the national level Harding collected 109,430 Montana votes and Cox won 57,375, figures considerably lower than the state major candidates, particularly that of Cox compared to Wheeler. Women voted in the general election of 1920, not in the primary, which may account for the fact that roughly five per cent more persons voted in 1920 than in 1916 in the major elections.

The Montana press was jubilant with the election results.

\(^1\)Waldron, op. cit., p. 177.

\(^2\)Ibid., p. 174.
"DIXON SWEEPS MONTANA IN G.O.P. SLIDE"\(^3\) headlined the Great Falls Tribune after the election counts seemed official in the capital. The Nonpartisans were engulfed by tidal waves,\(^4\) the Tribune reported. Similar sentiments were echoed throughout the Montana press as editors wrote the League's eulogy with elation.

The Anaconda Standard wrote that "BUTTE KICKS OUT THE REDS AND ELECTS AMERICANS TO OFFICE,"\(^5\) although Butte had overwhelmingly voted for Wheeler in the election. The Standard was not content to merely win the election but continued its harangue of Wheeler with an epitaph called the "Eclipse of Wheeler" typical of its abusive style of journalism:

A candidate cannot expect to climb into power by attacking one of its leading industries. Mr. Wheeler, an accident in politics, chewing the end of bitter reflection today, found this lesson an expensive one...Butte spat him out of her mouth with all the noisome crew of red [sic] and wobbled who followed him...no doornail was ever more dead than Townleyism.\(^6\)

The state weeklies said little about the results of the election. The Judith Basin Farmer called the outcome

\(^3\)Great Falls Tribune, November 3, 1920, p. 1.
\(^4\)Ibid.
\(^6\)Ibid., November 4, 1920, p. 1.
"the defeat of radicalism". Tom Stout of that newspaper wrote that the Non-Partisan League was dead and that the agrarian political movement contained too many radicals, which was the reason Wheeler was defeated in the election. Stout felt that Wheeler was not an issue. On the other hand, the Miles City American commented on the campaign saying that "Outside of having a lot of bunk peddled to them about being good 'Americans,' the 'Democrats' who voted for the Republican reactionary ticket will get absolutely nothing for their treachery."\(^9\)

The Butte Bulletin was more venomous in its remarks about the election than any other pro-Wheeler newspaper. Its indictment of the Standard was particularly bitter. Dunne wrote about the Standard that:

much has been published by the editorial leper who manages the Anaconda Standard...he speaks of the "reds" or radicals...he congratulated the people of Montana on being saved from the "blight" which is on North Dakota...the editor of the Anaconda Standard is like any street-walker--yellow.\(^{10}\)

Dunne ended his contemptuous assessment of the Standard and of the Company influence with pledges to continue his

\(^7\)Judith Basin Farmer, November 4, 1920, p. 8.

\(^8\)Ibid.

\(^9\)Miles City American, November 4, 1920, p. 4.

\(^{10}\)Butte Bulletin, November 5, 1920, p. 4.
harassment of them in the most inflammatory remarks of
the campaign:

The cuttle-fish of privilege has been spreading
its dirty black ink upon the political seas. The
Anaconda Standard with its prostitute editor has
become utterly discredited. It lied when the
truth would have served better. Like the skunk,
the fumes of its stinking lies rise to high
heaven...from now on, the Bulletin will renew
its efforts to smoke out the skunks and badgers
of the tin-horn type of politicians who have
made Butte their breeding place.11

The Helena Record-Herald, expressing what a majority
of Montanans had done silently with their vote, said that
the Dixon victory was a "return to sanity,"12 hopeful for
the "back to normalcy" reminiscent of Wilson's post-war
desires. Other daily newspapers were unanimous in their
beliefs that the farmer-labor party was dead and that Town-
ley and Dunne would have no influence in the future.13 The
Helena Independent praised the Loyalty League for its
attempts to expose Dunne, Townley, and the Non-Partisan
League for the past thirty months. Moreover, the Indepen-
dent continued that the League deserved a vote of thanks
from the people of Montana.14 The Independent indicated

11Ibid.
13Great Falls Tribune, November 6, 1920, p. 6; Butte
Miner, November 4, 1920, p. 4.
14Helena Independent Record, November 4, 1920, p. 4.
CHAPTER ONE

One Sunday afternoon in February of 1919 a large crowd "filled" the seats of the Liberty Theater, a popular meeting hall in the small western Montana city of Missoula. The stage was occupied by a man of medium stature, with thin, graying hair, clean-cut features, a prominent jaw, rimless spectacles, and a respectable paunch. His voice, softened by lingering touches of a drawl, was a splendidly tuned and convincing instrument. This was Joseph M. Dixon, a former United States senator from Montana, eulogizing Theodore Roosevelt at a memorial service for that recently deceased ex-president.

Only the most insensitive members of the audience could have ignored the poignant conjunction of orator and subject. Seven years earlier, after Dixon had managed the colonel's unsuccessful pre-convention drive for delegates, he had sacrificed his first political life for Roosevelt when he became the Lone Republican whose senatorial or gubernatorial term expired in 1913 to bolt the party. He had then compounded this crime by assuming the direction of the Bull Moose campaign. Moreover, in spite of his political vicissitudes, Dixon remained a fanatically dedicated Rooseveltian to the end of his days. Alert spectators listening to Dixon relate "intimate incidents" in the life of his subject might have reflected on the current retirement of their jovial fellow-townsmen. After almost three decades of unremitting activity, he was now dividing his time between his ranch on Flathead Lake and his home in Missoula, where he possessed varied business interests. Since the sale of his newspaper in 1917, he had abstained from politics. In fact, the act of disposing of that organ had seemed tantamount to a renunciation of a renewed public career. But, in view of the control of the party machinery by his foes and his bitter feud with the Anaconda Copper Mining Company, a dominant force in Montana politics, perhaps the gesture had been supererogatory.

As the eulogist wove varied historical strands into his address, some of the audience might have perceived another link between the Montanan and his deceased leader. Like Roosevelt, Dixon was an inveterate reader whose inability to refrain from buying books had resulted in his
amassing an unusually large private library. Although he was always partial to works dealing with North Carolina and the West, his favorite was biography which, he explained in a letter to a friend, revealed with more insight than other kinds of literature "the story of life, and painful progress."

Early in his lengthy memoir of Roosevelt, Dixon provided a rationale for his own biography. He asserted that men who have won places in history might be "...of interest and importance to posterity as individuals or as representatives of their time, or in both capacities."

For the fullest account of the ceremonies as well as the complete text of Dixon's address, see Missoula Missoulian, February 10, 1919. (Hereafter cited as Missoulian.)

CHAPTER TWO

In his tribute to Theodore Roosevelt, Dixon insisted that

...to understand intelligently any man who has achieved substantial results...we must first turn...to the accident of his birth, in the time and place of his birth, in the influences and atmosphere of his childhood and youth, we can often find the key to the mystery which every human life presents and obtain a better explanation of the character and career of the man himself.

These words will well have been autobiographical, for an understanding of Dixon required a comprehension of the Quaker environment of his boyhood and of the towering presence of his father.

On the thirty-first day of July, 1867, a son was born to Hugh and Adaline Murchison Dixon in their farm home near the crossroads village of Snow Camp, North Carolina. The infant was the third of four children and the only son. He was christened Joseph Moore after a Quaker educator who was then occupied in rebuilding the schools of that sect in North Carolina. The first name might also have been a compliment to the baby's paternal grandfather.

Snow Camp still slumbers approximately 25 miles from Greensboro in the west-central portion of the Piedmont. Time has dealt so gently with the landscape that it seems to have been hardly altered over the centuries. The area, which is still primarily agricultural, is rolling and heavily wooded. The old mills and factories, deteriorating and abandoned, have blended into the countryside.

In 1867 Snow Camp was a predominantly Quaker enclave and its focal points were situated at a crossroads a half mile from town. In a hillside site carved out of the surrounding woods sat the meeting house where members of the Society of Friends gathered much importance: the meeting-house, the school, and the cemetery. Rude, upright and irregularly cut gravestones, dating back to 1764, indicate the longevity of the settlement. The carved names show a multitude of
on customarily encountered at Helena in alternate winters. For a prop.
ambitious man like Dixon, these relationships could produce dividends.

* * * * *

The year of 1902 gave promise of being a relatively quiet year in
Montana politics. Only two major offices would be contested: an
associate judgeship on the state supreme court; and the sole Montana
congressional seat, which was the long-term object of Dixon's ambition.

Dixon believed that dividing when to launch one's candidacy was a
high political art. Hence, in 1902 he must have examined closely both
the political geography and the party alignments of Montana in an ef-
fort to determine whether the odds for his candidacy were propitious.

Montana presented a geographic challenge to a prospective candi-
date. Topography and climate influenced the economy. No politician could
forget that the bulk of the state's income in 1902 was provided by mining
and timber in the west, wheat and other grains in the east, and cattle
and sheep-ranching in virtually every section. These were supplemented
by meager manufacturing based almost exclusively on extractive indus-
tries. Copper, wheat, lumber, livestock, and wool influenced balance
sheets and politics alike.

Nor could an aspiring politician ignore Montana's racial compo-
nent. The Census of 1900 estimated that the thinly populated state possessed
fewer than two hundred and fifty thousand inhabitants, more than half
of whom were either of foreign birth or parentage. The leading national
groups were Canadian, Irish, English, German, Swedish, Austrian and
Swiss. Most of these European-Americans lived in local groups. The
Irish and Germans gravitated towards the mining areas; the Scandinavians
as in Minnesota and the Dakotas, thronged into farming country.

Dixon would also have to take account of the presence in Montana of
powerful economic forces, which employed cash and other weapons in their
attempt to obtain political control. While the two transcontinental
railroads were not mere spectators, the copper titans were notable
participants. The Anaconda Copper Company with its Standard Oil
connections, William A. Clark, and F. Augustus Heinze indulged in ter-
rible three-cornered warfare during this era.

The predicament in which the Democrats found themselves must have
angered Dixon. Although they had dominated the last three electoral
years, they were suffering from the after-effects of the widely-publicized
fight between the recently deceased Marcus Daly and Senator Clark and
from the bitter hostility between the political forces which split al-
giance between the Anaconda and Heinze. In addition, they would
have the task of retaining the support of the independent voters who
were suspicious of the brawling overlords of Butte.

In contrast, the problems of the Republicans had been alleviated by
two auspicious developments. They were now at last superficially
called, although the strife between the former Gold and Silver fac-
tions had left lingering resentments. Moreover, after his enthusiasm
in Montana and Dakota, Theodore Roosevelt was popular, hence exploit-
able, in the state. Third, McKinleyartyed was of greater symbolic
value to the Montana G.O.P., than he had been in life.

The Republicans were not without sources of dissension, of course.
Forest among those was the commanding presence of Thomas H. Carter.
Forty-eight years of age, small in stature, with white hair and brows
and liquid whiskers, he had become the undisputed leader of Montana's
Republicans and a national figure. A Helena lawyer by profession, he
served as the last territorial delegate and the first congressman,
commissioner of the General Land Office in Benjamin Harrison's admin-
istration, chairman of the G.O.P. national committee in 1892, and sena-
tor from 1893 to 1901. Now he was president of the national commis-
sion for the St. Louis World’s Fair, an index of his standing within the
party. In addition, with a Republican in the White House and Montana's
senator, he was representative Democrats, Carter continued to handle
legislative problems of interest to the state and to allocate the fed-
eral patronage to which Montana was entitled.

Carter was complex. On the one hand, he was a tender and devoted
bachelor and father, a loyal friend, a fancier of roses, a staunch Cath-
olic, and a proud Irishman, unquestionably able and shrewd. He was also
handsome, inordinately vain, overly punctilious, cynical, brutally
hostile to deviation, arrogant, demanding, and ruthless in his relations
with men whom he regarded as his political or intellectual inferiors.
Given these characteristics, "Uncle Tom" was not an easy political boss.
Moreover, while he possessed devoted lieutenants, he had accumulated en-
emies who would not under his domination and who would be only too willing
to humble him if the opportunity beckoned even faintly.

Although later hailed as the legislative father of the postal sav-
ings system, Carter was a self-styled conservative. A member of the
dominant inner circle of the Senate and an associate of the rich but well-born and other men with significant power, he was sympathetic to the Anaconda Copper Company and to the railroads operating in Montana.

Obviously Carter and Dixon were virtually fated to clash. Carter was thirteen years older than the Missoulian and had been a national figure almost a decade before Dixon had even been elected to the state legislature. When Dixon failed to exhibit a willingness to become a protégé of Carter, it became apparent that their ambitions conflicted. Moreover, the two men differed in temperament and ideology. When the estrangement between Carter and Dixon finally occurred, it was exacerbated by their lack of mutual associates. Carter was linked with the Nelson Aldrich group in Washington. In Montana his closest political intimates were Thomas A. Harlow, the cool, astute Helena banker-politician; John E. Edwards, the redbound leader of Rosebud County, who combined banking, newspaper publishing and land speculation; and Charles M. Bair of Billings, a wealthy entrepreneur and sheep-raiser.

But not even Carter was a law unto himself. He was gripped by an overwhelming desire to return to the United States Senate in 1901. Since the state senators elected in 1900 would cast ballots in the legislative concourse three years later, Carter would be virtually compelled to work for the party nominees for both state and local offices regardless of his preferences. Although he might with reason have preferred that a Democrat hold the congressional seat, a shrewd politician like Carter probably viewed the overt undercutting of a G.O.P. circle as a dangerous practice.

September, 1902, with its scheduled state conventions, brought into play the Democratic maneuvering of a head. It had been evident early that Clark and the Anaconda factions had become reconciled, at least temporarily, now that Daly was dead. As Miles Ramsey, the reform-minded editor of a western Montana weekly, phrased it: "After all these years of strife and turmoil, it is pleasant to see the Anaconda Standard and Butte Miner dwelling together in unity."

When the Democrats convened at Bozeman, the Anaconda-Clark faction dealt summarily with the Heulene insurrection against their dominant. When the central committee refused to seat the United Copper Company's delegation from Silver Bow County, Heulene's men were left without a political base.

The Democrats then nominated John M. Evans, a Missoula lawyer, for the Congressional seat on the first ballot and district judge Jere B. Welborn of Great Falls for the supreme court on the third.

Unfortunately for the Democrats, the Heulene men, after being expelled from the convention, kept moving until they reached Helena. There, to the intense indignation of the local Clark and Dixon men, they formed the Labor Party. Then, with the remnants of the Populists, they nominated Martin Bee, of Butte, for Congress. They reserved a decision on the judiciary.

Even before the Bozeman events, Republicans had viewed the coming campaign with unusual "equanimity and cheerfulness." No one at the Democratic convention had been more joyous than the Republican observers. Dixon said the Democrats were having "a monkey and a bird line of it here this afternoon, and the fun will fly tonight." He was confident that their "disrupted party would seem to work for our party possible and probable."

Given these suspicious signs, the Republican nomination for the House seat was to be coveted. Although he followed the political custom of displaying little public interest in the office, Dixon did not conceal his eligibility. In supporting Henry Thomson for sheriff of Missoula County shortly before the state convention, Dixon advanced a line of argument which was equally applicable to himself. He stressed the Republicans' record in office and the burden of recent defeats. He also claimed that "he must give the young men a chance."

Dixon could also realize that he had additional credentials. In his battle against a capricious electorate he had won heavily. He had served with distinction at Helena and demonstrated throughout western Montana his ability to make effective speeches. He was personable and his habit of residence in Missoula he had built up a large acquaintances. Moreover, not only had he avoided entanglements in the continuing Butte intrigue, but he was viewed favorably by the Anaconda's political leaders and by labor. Except for his flirtation with free silver, he was almost too perfect a candidate.

The most obvious obstacle to the fulfillment of Dixon's ambition was Carter. Although "Uncle Tom" had bestowed two signs of approval on the Missoulian earlier in the year, he did not support Dixon's aspirations. Instead, shortly before the Republicans met, the editor of a paper that Carter owns announced that the party would probably nominate Judge
### CLIMATOLOGICAL DATA

#### MONTANA SECTION

**William T. Lathrop, Meteorologist**

**Vol. XXXVII. Helena, Montana, September, 1925, No. 9**

**GENERAL SUMMARY**

The month was not remarkable in temperature. The mean for the portion lying west of the Continental Divide was above normal (less than a degree), while the divisions east of the Divide were below normal. The warmest interval was from the 1st to the 8th; the coolest, from the 25th to 28th, and, in the central division, from the 25th to the 30th.

Precipitation was well above normal in the eastern and western sections, and nearly double the normal in the central division. Snowfall was heavy in the latter. A sharp fall in temperature the night of the 20th was accompanied by precipitation which changed from rain to snow, heavy snow in the Main lunge region, causing irreparable damage to stade crop, through breakage, in east slope towns, and damage to wire and poles which has been estimated at $600,000. The number of reports on snow is notable.

### TEMPERATURE

The monthly mean for the State, as shown by the records of 10 stations, was 5.5°. The mean departure from the normal for 12 stations having ten or more years' record was -0.8°. The highest temperature recorded in the three divisions were as follows: West of the Divide, 83° at Sunset on the 1st; Central Division, 91° at Denton on the 17th; Eastern Division, 97° at Libby on the 30th. The lowest temperatures by divisions were as follows: West of the Divide, 12° at Fortine on the 26th; Central Division, 10° at Adel on the 6th; Eastern Division, 21° at Libby on the 21st.

### PRECIPITATION

The monthly average for the State, as shown by the records of 10 stations, was 1.98 inches. The mean departure from the normal for 12 stations having ten or more years' record was 0.5 inch. The greatest monthly amount was 0.98 inches at Adel. The least monthly amount was 0.10 inch at Libby. Snowfall averaged 1.1 inches west of the Divide, 0.9 inches central division, 0.6 inch in the eastern division, and 0.6 inches for the State as a whole.

### AURORAS

The following stations reported auroras on the dates given:

- West of Divide—East Anacosa, 30, 21; Fortine, 24; Kalispell, 30; Orando, 23; Polson, 24; St. Ignatius, 21; Stevensville.
- Central Division—Burlington, 8; Anaconda, 18, 21, 22, 25, 24; Cascade, 15, 20, 21, 24, Choteau, 20.
- Eastern Division—Nearly every night in third week of October.

### PRESSURE, WIND, HUMIDITY, AND SUNSHINE DATA

#### COMPARATIVE DATA FOR SEPTEMBER

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<th>Year</th>
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### Footnotes

- **Explanations of Reference Maps Used in This Publication**
- **Daily Temperatures for August, 1925**
- **Monthly Precipitation for August, 1925**
- **Average Monthly Precipitation for August, 1925**
- **Average Monthly Temperature for August, 1925**
- **Average Monthly Sunlight for August, 1925**

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**U.S. Department of Agriculture, Weather Bureau**

CHARLES F. MARVIN, Chief
CLIMATOLICAL DATA

MONTANA SECTION

WILLIAM T. LATHROP, Meteorologist

Vol. XXVIII. HELENA, MONTANA, AUGUST, 1925. No. 8

GENERAL SUMMARY

The monthly mean temperature was above normal in the east, and below in the central and western sections. The signs of the departures varied in a pronounced manner in neighboring districts, but the general average departure for the State as a whole was slightly below normal. The month was warmer than the normal February, with the usual normal range of temperature. No State records were broken or even approached. The warmest days were the 1st and 31st (central and western divisions), the 24th (west of the Divide), the 30th to 32d (central and eastern divisions), and the 30th (central and eastern division). The coolest days in the east were the 16th and 26th; in the other divisions, the 25th, 29th, and 30th. Precipitation averaged 0.86 inch below normal in the eastern part of the State, where drought developed in various sections. While the distribution was quite uneven, the region west of the divide averaged appreciably above normal, and the central division, near, but slightly below, normal. There was little hail and no destructive wind storms reported.

TEMPERATURE

The monthly mean for the State, as shown by the records of stations, was 64.5°. The mean departure from the normal for stations having ten or more years' record was —0.5°. The highest temperatures recorded in the three divisions were as follows: West of the Divide, 99° at Three Forks on the 7th; central, 100° at Busted on the 9th and Kinneys on the 10th: Eastern, 69° at Glendive on the 22nd and 23rd. The coolest temperatures were as follows: West of the Divide, 24° at Pleasant Valley on the 31st and Upper Yahk on the 8th; central, 22° at Hobo on the 31st and Eastern, 29° at Outlook on the 24th.

PRECIPITATION

The monthly average for the State, as shown by the records of stations, was 0.89 inch. The mean departure from the normal for 82 stations having ten or more years' record was —1.15. The greatest monthly amount was 2.85 inches at Ower Agency and Pinrose reported a total absence of precipitation. Snow was reported by one station, Pipestone in two areas.

AURORA


Explanation of Reference Marks Used in This Publication

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It should be noted that the data presented are based on monthly averages. The data include temperatures, precipitation, and other meteorological parameters for various locations in Montana. The data are presented in a tabular format, with columns for different stations, temperatures, and precipitation. The data are used to analyze climate patterns and trends in Montana.
CLIMATOLOGICAL DATA

MONTANA SECTION

WILLIAM E. MAUHAN, Meteorologist

Vol. XXVIII. Helena, Montana, July, 1925. No. 7

GENERAL SUMMARY

All three divisions of the State averaged above normal in temperature, with an aggregate average well above. Stations, however, in the northeastern counties, reported a deficiency. There was an exceptionally warm period in the State as a whole from the 1st to the 17th. Crop deterioration, brought about by excess heat, continued through the end of June. Some hot, dry weather from all parts of the State. All but two stations in the eastern half and many in the other divisions recorded temperatures of 100°F. The average amount of precipitation was deficient in all divisions. The only large area reporting an excess was that in the Glendive, Winton and Great Falls territory. The heavy precipitation extended to almost all parts of the State. The period of the month was the result of widespread showers and cooler weather. All crops suffered—latterly corn and beans particularly. Corn and beans progressed well, but not enough for best growth. Harvesting started in July. Threshing began near the end of the month. Some hail occurred in different parts of the State. Hail became a serious nuisance and caused the grass curing early and short, unusually hastened the drying and shipping of hay.

TEMPERATURE

The monthly mean for the State, as shown by the records of 81 stations, was 68.3°. The mean departure from the normal for stations having ten or more years' record was +2.1°. The highest temperatures recorded in the three divisions were as follows: West of the Divide, 109°F at Helena and Fort Benton; Central Division, 108°F at Big Timber on the 22nd, and 107°F on the 20th; Eastern Division, 110°F at Biddle on the 14th. The lowest temperatures reported were as follows: West of the Divide, 29°F on the 19th; Central Division, 32°F at Babb on the 18th; and Eastern Division, 35°F at Hailey on the 8th.

PRECIPITATION

The monthly average for the State, as shown by the records of 81 stations, was 1.13 inches. The mean departure from the normal for stations having ten or more years' record was -0.30 in. The greatest monthly amount was 7.26 inches at Butte, while the least monthly amount was a trace at Haugen, and Kiplinger. No station reported any snowfall.

HAIL DATA

Hail was reported from stations on and dates as follows:

West of Divide—Anaconda, 12; East Anaconda, 4, 29; Libby, 24; Missoula, 29; Philipsburg, 29; Plains, 24; Stevensville, 29; Butte Orchard, 11; Central Division—Choteau, 35; Copper, 29; Dillon, 5; Flathead Creek, 24; Gold Butte, 7; Hobson, 13, 34; Missoula, 29; Eastern Division—Kalispell, 28; Libby, 25, 29; Miles City, 34; Paxton, 30; Potes, 20.

AURORAS

The following stations reported auroras on the dates given:

West of Divide—Anaconda, 36; Central Division—Choteau, 36; Helena, 14, 27; Eastern Division—Flathead, 25; Glendive, 16; Impound, 8; Sentinel Butte Pass, 25; Sioux Pass, 18, 27; Valentine, 14.

COMPARATIVE DATA FOR JULY

<table>
<thead>
<tr>
<th>Stations</th>
<th>Atmospheric pressure (inches of mercury)</th>
<th>Temperature</th>
<th>Precipitation</th>
<th>Average No. of days</th>
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<td>Min.</td>
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</tbody>
</table>
**CLIMATOLOGICAL DATA.**

**MONTANA SECTION.**

**William T. LaFleur, Meteorologist.**

**Vol. XXVII.** Helena, Montana, August, 1924. No. 8.

**GENERAL SUMMARY.**

With one exception this was the coolest August since 1912. The month was 4.8° cooler than July, 1924, and 7.0° cooler than August, 1923. The warmest day generally in the eastern division was the 27th; in the eastern division, the 28th, while in the central division the highest temperature fell on the 21st and 25th. On these dates temperatures exceeding 100° occurred in all divisions. Lowest temperatures of the month occurred on the 30th and 31st. Numerous stations reporting temperatures considerably below the freezing point, with killing frost, though which vegetables crops, garden corn, and potatoes (in some places) suffered greatly. Precipitation averaged a quarter of an inch less than normal. Hailey the southern half of the State was mostly under 1.00 inch, and the northern half above, excepting an area in Hill, Lake, and Chouteau Counties, and another in the northwest. A small tornado was reported on the 17th in southeastern Custer County. No lives were lost, and the damage was limited to small buildings.

**PRESSURE, WIND, HUMIDITY, AND SUNSHINE DATA.**

**Comparative Data for August.**

<table>
<thead>
<tr>
<th>State</th>
<th>Temperature</th>
<th>Precipitation</th>
<th>Average No. of Days</th>
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<td>Montana</td>
<td>62.1°</td>
<td>5.47</td>
<td>18.9</td>
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<tr>
<td>Wyoming</td>
<td>62.5°</td>
<td>5.97</td>
<td>19.2</td>
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<td>Idaho</td>
<td>63.2°</td>
<td>6.10</td>
<td>18.9</td>
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<td>Nevada</td>
<td>63.4°</td>
<td>5.70</td>
<td>19.1</td>
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<td>Utah</td>
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<td>19.0</td>
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<tr>
<td>Colorado</td>
<td>62.0°</td>
<td>5.20</td>
<td>18.8</td>
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</tbody>
</table>

**Explanation of Reference Marks Used in This Publication.**

- - Temperature
- - Precipitation
- - Average No. of Days

**Note:**

- Temperature and precipitation data may be compared to the previous day, on which is shown average, mean, and median values.
- Precipitation has been recorded in tenths of inches or decimals.
- Data are from federal meteorological stations and are as follows: 
  - Agricultural College, Bozeman (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Bozeman (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Butte (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Choteau (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Colville (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Council Bluffs (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Durango (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Eugene (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Galena (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Goodland (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Great Falls (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Helena (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Havre (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Montana (J. W. = 10°F, Jan. 1924: 10°F, Jan. 1924: 10°F)
  - Other stations have been recorded at the Federal Weather Bureau.
CLIMATOLOGICAL DATA.

U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CLIMATOLOGICAL DATA.

MONTANA SECTION.

WILLIAM T. LAHEY, Meteorologist.

Vol. XXVII. Helena, Montana, September, 1924. No. 2.

GENERAL SUMMARY.

The western and central divisions of Montana averaged considerably lower in temperature than the eastern division, but both were above normal, while the eastern division was sufficiently lower than normal to give the State a negative departure for the month. September averaged 2°F cooler than September, 1923, and nearly 5°F cooler than August, 1924. The lowest temperature occurred early in the month, from 24 to 26, and the highest temperature reached 74°F. The lowest temperatures in the eastern division were recorded mainly from the 29th to the 30th, with several from the 3rd to the 9th. Minima in the central and western divisions occurred between the 10th and 20th. A clear, mild type of weather predominated. There were technically no cold snaps, and no remarkable storms except a violent local windstorm near four miles north of Deer Lodge on the 9th, which raised dust to the air and destroyed a pamphlet and pump. Substantial rainfall is lacking for a report that this was a tornado. Precipitation was below normal in all divisions, and at all stations west of the Continental Divide. Yet rain or snow intermingle considerably with the farming and field work and hauling. The highest totals of precipitation were those of the eastern division, the heaviest those of the central division.

TEMPERATURE.

The monthly mean for the State, as shown by the records of stations, was 54.4°F. The mean departure from the normal at stations having ten or more years' record was —0.8°F higher than the normal, which added to the above average was 1°F. West of Divide, 97°F at Anaconda on the 4th; Central, 90°F at Winifred on the 24th, Eastern, 94°F at Glasgow on the 21st; and at Billings on the 4th, the lowest temperature was recorded by divisions as follows: West of Divide, 18°F at Deer Lodge (Nov. 8th); Central, 18°F at Hardin on the 26th; Eastern, 29°F at Lewistown on the 29th; Northern, 18°F at Glasgow on the 11th, 16°F at Hardin on the 29th; Eastern, 24°F at Great Falls on the 12th; and Western, 26°F at Great Falls on the 11th. The highest temperature was recorded at Billings on the 4th, at 98°F.

PRECIPITATION.

The monthly average for the State, as shown by the records of stations having ten or more years' record was 0.87 inch. The greatest monthly amount was 3.30 inches at Billings, the least monthly amount was 0.01 inch at Poplar. The monthly rainfall varied from 0.01 inch in the eastern division to 1.55 inches in the central. Helena Dam reported a total fall rainfall of 10 inches, and was the only station exceeding 10 inches.

Hail data was reported from stations and on dates as follows: West of Divide, 15, Central Division, 15, Eastern Division, 15; Helena, 15; Highwood, 15, Eastern Division, None. Not recorded.

AURORAS.

The following stations reported aurora on the dates given: West of Divide, 15, Pleasant Valley, 15, Central Division, 15; Butte, 15, Cascade, 15, 27; Drumheller, 15; Flathead Creek, 15; Havre, 15, 25; Helena, 15; Winifred, 15; Eastern Division, 15; Fairview, 15; 25; Paxton, 15; Poplar, 15; Red Lodge, 15; Sentinel Butte, 2, 23; Valentine, 24.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE DATA.

CONTRASTIVE DATA FOR SEPTEMBER.

Temperature, Precipitation, Average No. of days.

YEAR

Temperature

Precipitation

Average No. of days

Explanation of Reference Marks Used in This Publication.

 Stations

Table:<br>

<table>
<thead>
<tr>
<th>Year</th>
<th>Temperature</th>
<th>Precipitation</th>
<th>Average No. of days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1924</td>
<td></td>
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</tbody>
</table>

The numbers have been rounded to the nearest whole number.

For the month of September, 1924.

1. Temperature in degrees Fahrenheit.
2. Precipitation in inches.
3. Average No. of days for which temperature or precipitation were recorded.

Station data compiled from the reports of the State Climatologist, the U.S. Weather Bureau, and various citizen meteorological observatories.
CLIMATOLOGICAL DATA.

HISTORICAL SOCIETY OF MONTANA, HELENA.

U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MONTANA SECTION.

WILLIAM T. LATROPE, Meteorologist.

XLVII. HELENA, MONT., JULY, 1924. No. 7.

GENERAL SUMMARY.

The general average of temperatures for the month was close to normal, but the greater portion of the State, including the eastern division and large areas elsewhere, was below normal. The western and central divisions, averaging the same, were more than two and one-half degrees cooler than the normal division. Highest mean temperatures were recorded in the Yellowstone and Missouri Valleys, while the lowest were in general, those of the highlands of the region of the Yellowstone Range and the Little Belt and Snowy Mountains. Maximum temperatures rose highest in Lincoln and Sanders Counties, where three divisions recorded 100° on the 24th. Lowest summer temperature, 27°F., was also recorded in the same month. Many stations over the State had minimum temperatures lower than the freezing point, but apparently only minor damage was done in any case.

There was a marked deficiency in precipitation for the State as a whole, though much of the Yellowstone Valley and the lowest, and smaller areas in the extreme east and west, had totals exceeding their normal amounts.

A small tornado occurred ten miles west of Broadus on the 6th and one mile west of Harvard on the 25th. Reports have been received of one near Judith Gap on June 25th.

TEMPERATURE.

The monthly mean for the State, as shown by the records of observations, was 66.1°F. The mean departure from the normal for stations having ten or more years' record was +0.1°F. The mean departure from the normal for stations having one to nine years' record was +0.1°F. The mean temperature recorded at the three divisions was as follows: West of Divide, 64.1°F. at Libby, Thompson Falls and Rock on the 30th; Central, 66.1°F. at Fort Benton on the 14th and 16th, and at Upper Yellowstone on the 11th; East, 64.9°F. at Ronan on the 19th and 20th, at Pray on the 22nd, at Malta on the 11th, and at St. Ignatius on the 16th.

PRECIPITATION.

The monthly average for the State, as shown by the records of all stations, was 1.7 inches. The mean departure from the normal for stations having ten or more years' record was -0.1 inch. The greatest monthly amount was 3.22 inches at Missoula; the least amount was 0.95 inch at Harvard. No station reported any snowfall, but snow fell in the mountains near some of them.

Hall was reported from stations and on dates as follows:

West of the Divide—Libby, 21; Central Division—Fort Benton, 17; Eastern Division—Valley City, 15; Hays, 17; Rock Springs, 16; Sentinel Butte Pass, 16.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE DATA.

HELENA.

COMPARATIVE DATA FOR JULY.

<table>
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<tr>
<th>Year</th>
<th>Temperature</th>
<th>Precipitation</th>
<th>Average No. of Days</th>
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<td>1923</td>
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### CLIMATOLOGICAL DATA.

#### MONTANA SECTION.

**WILLIAM T. LATZBRO, Meteorologist.**

**XXVII. HELENA, MONT., JUNE, 1924. No. 6.**

**GENERAL SUMMARY.**

Temperature and precipitation varied greatly in Montana during the month. The State mean temperature was the lowest for since 1917, and was less than 2° higher than May, 1924. The warmest weather came in on the closing days of the month, with elevated temperatures before fogging, accompanied in the northwest by a heavy snowfall, was recorded at the close of the month.

The annual excess of precipitation in the eastern division balanced deficiencies in the other divisions. Most of the exceptional totals, however, were in the northwestern counties. The greatest snowfall was 14 inches at Columbia Falls on the 15th. Range and dry land crops suffered from scarcity of moisture in the southwest and in west-central counties. A tornado in extreme northern Cascade County on the 25th demolished buildings in its path, injured a number of persons, and damaged grain crops.

### TEMPERATURE.

The monthly mean for the State, as shown by the records of the stations, was 57°. The mean departure from the normal for the months of March and April was 2.7°. The highest temperatures recorded in the three divisions were as follows: West of Divide, 14° at Thompson Falls on the 30th; Eastern, 80° at Three Forks on the 17th; Eastern, 94° at Rosebud on the 15th. The lowest temperatures by division were as follows: West of Divide, 0° at Missoula on the 4th; Central, 1° at Bismarck on the 30th; Eastern, 27° at Bismarck on the 16th. The temperature at the summits of the Continental Divide was in the 20s.

### PRECIPITATION.

A monthly average for the State, as shown by the records of the stations, was 2.75 inches. The mean departure from the normal for the months of March and April was 2.5 inches. The greatest monthly amount was 7.98 inches at the station 9 miles north of Big Sky; the least monthly amount was 0.01 inch at Beavertown. The average snowfall was the month was 28 inches in the Central Division, 0.1 inch in the Eastern Division; 0.1 inch; the general average for the month was 0.9 inch.

### HAIL DATA.

Hail was reported from stations and on dates as follows:
- West of Divide: Anaconda, 27; Eureka, 5, 6, 20; Missoula, 17; Stevensville, 17; Whitehall, 7, 24; Butte, 5, 6, 20; Great Falls, 19; Conrad, 13; Denton, 9, 17, 18.
- Central Division: Whitehall, 17; Great Falls, 5, 6, 20; Boulder, 5, 6, 20; Mullan, 17; Superior, 7, 24; Butte, 5, 6, 20; Great Falls, 19; Conrad, 13; Denton, 9, 17, 18.

**Explanation of Reference Marks Used in This Publication.**

1. Temperatures are read in the morning; maximum temperature and mean temperature are recorded for each station at which it is always observed. Similarly, a, b, c, etc., denote stations.
2. Precipitation data is obtained from the reports of the U.S. Weather Bureau and the U.S. Department of Agriculture, with the exception of data for the State of Oregon, which is obtained from the U.S. Department of Agriculture and the Oregon State Department of Agriculture. Precipitation data is obtained from the reports of the U.S. Weather Bureau and the U.S. Department of Agriculture, with the exception of data for the State of Oregon, which is obtained from the U.S. Department of Agriculture and the Oregon State Department of Agriculture.
3. Hail data is obtained from the reports of the U.S. Weather Bureau and the U.S. Department of Agriculture, with the exception of data for the State of Oregon, which is obtained from the U.S. Department of Agriculture and the Oregon State Department of Agriculture.
CLIMATOLOGICAL DATA.

MONTANA SECTION.

WILLIAM T. LATHROP, Meteorologist.

Vol. XXVII. Helena, Mont., May, 1924. No. 5.

GENERAL SUMMARY.

It was cool for May in the eastern division, and warm over the rest of the State, especially west of the Continental Divide. Although the eastern division averaged 3.3° below normal in temperature, the average departure from normal for the entire State was nearly a degree in the positive direction. The stations west of the Divide averaged more than 4° above normal. With two exceptions it was the warmest May for the State as a whole since 1912. These exceptions were in 1901 and 1910. Neither the highest nor the lowest temperature recorded during the month is worthy of special note. The warmest day through most of the State was the 15th, but at many stations on the east slope of the Main Range the month's maximum was not reached until the 16th. West of the Divide the warmest period in some districts was the 2d and 3d. The coldest day was the 6th west of the Divide; in the central division it varied from the 6th to the 10th; in the east there was no period which could be put down as the coldest generally, though the lowest temperature of the month occurred at more stations on the 7th than on any other day.

The lightest average total precipitation in Montana's record was recorded, and lack of moisture was seriously felt in several districts. Each division averaged more than an inch less than normal, while the central and western divisions averaged more than an inch and a half less than normal.

TEMPERATURE.

The monthly mean for the State, as shown by the records of 109 stations, was 52.4°. The mean departure from the normal for 81 stations having ten or more years' record was +0.8°. The highest temperatures recorded in the three divisions were as follows: West of Divide, 97° at Libby on the 15th; Central, 95° at Kenilworth on the 15th; Eastern, 93° at Roy on the 8th. The lowest temperatures by divisions were as follows: West of Divide, 18° at Fortine on the 5th and 8th and at Trout Creek on the 6th; Central, 17° at Brenner, Hebgem Dam and Virginia City on the 6th; Eastern, 18° at Roy on the 20th and Wheaton on the 25th.

PRECIPITATION.

The monthly average for the State, as shown by the records of 119 stations, was 0.84 inch. The mean departure from the normal for 85 stations having ten or more years' record was +1.44 inches. The greatest monthly amount was 2.63 inches at Adel. The least monthly amount was 0.10 inch at Kippen. The average snowfall West of the Divide was 0.4 inch; in the Central Division, 1.0 inch; in the Eastern Division, 1.0 inch; the general average for the State was 0.8 inch.

HAIL DATA.

Hail was reported from stations and on dates as follows:


AURORAS.

The following stations reported auroras on the dates given:

- West of the Divide: None.
- Central Division:NONE.
- Eastern Division: Barlows Ranch (southern Custer Coun 21; Rock Springs, 21, 27.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE DATA.

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<thead>
<tr>
<th>Stations</th>
<th>Mean</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Date</th>
<th>Relative humidity</th>
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COMPARATIVE DATA FOR MAY.

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Explanation of Reference Marks Used in This Publication.
CLIMATOLOGICAL DATA.

HISTORICAL SOCIETY OF MONTANA.

U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CHARLES F. MARVIN, Chief.

MONTANA SECTION.

WILLIAM T. LATHEROP, Meteorologist.

VII. Helena, Mont., May, 1924. No. 5.

GENERAL SUMMARY.

Cool for May in the eastern division, and warm over the State, especially west of the Continental Divide. The eastern division averaged 3.8°F below normal in temperature, the average departure from normal for the entire month was a degree in the positive direction. The stations in the Divide averaged more than 4°F above normal. With the exception, it was the warmest May for the State as a whole. These exceptions were in 1910 and 1919. Neither the lowest temperature nor the highest temperature recorded during the month was the 15th, but at many stations on the east the Main Range the month's maximum was not reached.

West of the Divide the warmest period in some places was the 2d and 3d. The coldest day was the 6th on the Divide; in the central division, it varied from the 6th to the 11th, as the lowest generally, though the lowest temperature of the month occurred at many stations on the 7th rather than other days.

Highest average total precipitation in Montana's record, and lack of moisture was seriously felt in several places. Each division averaged more than an inch less than the central and western divisions averaged more than an inch and a half less than normal.

TEMPERATURE.

Monthly mean for the State, as shown by the records of stations, was 52.4°F. The mean departure from the normal stations having ten or more years' records was +0.8°F. Greatest temperatures recorded in the three divisions were as follows: West of Divide, 92°F at Libby on the 15th; Central, 90°F at Deer Lodge on the 15th; Eastern, 92°F at Roy on the 8th. Lowest temperatures by divisions were as follows: West of Divide, 18°F at Fortine on the 5th and 5th at Trout Creek 8th; Central, 17°F at Bremen, Hebbin Dam and Virginia on the 6th; Eastern, 18°F at Roy on the 20th and Wheaton 6th.

PRECIPITATION.

Monthly average for the State, as shown by the records of stations, was 0.84 inch. The mean departure of the 1.55 stations having ten or more years' record was 0.10 inch. The greatest monthly amount was 2.38 inches at 1 station. The least monthly amount was 0.10 inch at Kippen, average snowfall West of the Divide was 0.4 inch; in the 11 Division, 1.0 inch; in the Eastern Division, 1.0 inch; and the average for the State was 0.8 inch.

HAIL DATA.

Hail was reported from stations and on dates as follows:

West of Divide.—Fortine, 5, 22, 23; Phippsburg, 26. Central Division.—Bremen, 28, 29; Dunkirk, 18, 19; Lothair, 18, 27, 28. Eastern Division.—Garland, 23.

AURORAS.

The following stations reported auroras on the dates given.

West of the Divide.—None. Central Division.—Hayward, 22. Eastern Division.—Bartholomew Ranch (southern Custer County), 21; Rock Springs, 21, 27.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE DATA.

Comparative DATA for May.

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Explanations of Reference Marks Used in This Publication.

- Separate Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
- Letters, A, B, etc., represent relative humidity. Letters, 0, 1, etc., represent precipitation, the numbers in the column of letters show the number of days with precipitation.
- Numbers in parentheses show the number of days with precipitation.
- The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are

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 inclusion of data on some particular stations.
HISTORICAL DATA
OF MONTANA
HELENA.

U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MONTANA SECTION

LIAM T. LATHROP, Meteorologist

HELENA, MONTANA, ANNUAL, 1925. No. 13

GENERAL SUMMARY

49.0° at Livingston to 37.8° at Hebgen Dam, a temperature for Montana in 1925 averaged high only one other year in the record (1910), exceeded. Highest mean annual temperatures "hot" of the upper Yellowstone and Missouri the basin between the Bitter Root Mountains and Sapphire Ranges; while the few stations annual temperatures lower than 40.0° lie in the overhead County and the district west of Yellow-

nors northern Phillips and Sheridan Counties on plains, with secondary cool areas extending south down the Main Range and its east slope, sections of west-central Montana. Every station than in 1924. 2 River County, recorded the extreme maximum in the year. 110°, on July 14th, and Garland, lowest minimum—46°, on December 27th. On December 27th there was a marked departure above normal in the area. While the variation was 8.8°, it was not as it was the greatest monthly departure of 1925, and a departure of 8.0°. During the of 1925 the monthly average variation from was in each case to above normal. Follow-

we departures in August and September came after which the remaining months again varied in the positive direction, with the warmest December.

precipitation for stations with a complete year's of 38.05 inches at Adel, Cascade County, to nearless Ranch, in southern Custer County. uneven distribution of rain and snow over Mon- tana the manuscript chart of total precipitation for the usual pronounced maximum, aside from

the usual development of the Sanders and Mineral rains exceeding 20 inches for the year appear at in the south-central and southwestern parts of Montana (east of the 100th meridian) aver-

precipitation than the rest of the State. The whole of Montana was 16.34 inches for the year, considerably greater than the average of 1924 and of 1916, excepting 1923, although in the east the year 1925 at numerous stations were lower than in average number of days with .01 inch or more, 85, on the general average of the last 30 years. The number of cloudy days was 111; and of clear days, 150. All for the year averaged 89.4 inches, or about 6 inches less than the year of 1924, notwithstanding this year's greater precipitation. The cold and wet October was a greater snowfall (averaging 11.0 inches) than any other month of the year. Heavy, moist snow fell on the east main Range during the week of 19-21, to damage to telephone wires, grain, shade trees, which had not yet cast their leaves, caused the loss of at least one life. The heavy snow-

fall was repeated in districts on the east slope on the night of September 20-27, with much less disastrous effects.

Two ranches suffered damages by high wind to buildings, etc., near Pendroy, Teton County, on January 18th. Losses were estimated at $1750. This wind was locally classified as a tornado, and there was testimony of a funnel-shaped cloud. We should hesitate, however, to classify it as a tornado, not so much because it occurred in a season in which tornadoes have been unknown in Montana, as because prevailing temperature conditions would not appear to justify it. On July 26th, high winds unroofed some buildings west of Circle. This storm was thought by some persons in the locality to be a tornado, but we have been unable to verify it as such.

WEATHER BY MONTHS

JANUARY began with Montana just recovering from the great cold wave of late December, 1924. The mean temperature for the month was well above normal in each division, with precipitation light east of the main Range and averaging much above normal west.

FEBRUARY was a comparatively mild month. Only two other Februarys in the record, 1924 and 1896, have had higher mean temperatures. Precipitation was near normal.

MARCH temperatures averaged well above normal in each division, and it was the warmest March in seven years. Precipitation was ample. At the end of March the snowcover averaged 5.5 inches greater than last winter.

APRIL continued the succession of warmer than normal months, with pronounced departures above normal in each division and no station dropping as low as zero during the month. A greater April total precipitation has occurred but twice.

May was remarkable as the warmest of that name in 24 years. The rains were much under normal on the average, in each division, with generous rains in the closing days.

June faltered in the march of warm months; temperatures averaged just normal in the central division, above normal in the west, and half a degree below normal in the east. The rains were above normal east of the Main Range, and, although averaging slightly above normal, a little below normal west of the Main Range.

July registered the warmest weather of the year, the means being above normal in all divisions, with the rains decidedly less than normal, and less than in June.

AUGUST went into the record with mean temperature near normal, slightly above normal in the east, and below in the other divisions and for the State, but with a wide range in extreme temperatures. Rainfall was light in the east, near normal in the central division, and above in the west.

SEPTEMBER as compared to normal was warm west of the main divide, and cool towards the east, though only slightly so in the eastern division. Precipitation was heavy.

OCTOBER turned out to be as cold as any October in the record of 31 years, being coldest in the east. Precipitation was much above normal in the central division, and moderately so elsewhere, with heavy snows, especially on the east slope.

NOVEMBER furnished a marked and pleasant contrast to October. The western division was slightly below normal in temperature, the other divisions well above. Precipitation was light in each division, with snowfall averaging 2.6 inches.

DECEMBER brought the year to a close with the highest December mean temperature since 1900. Not a single station reported below normal. Precipitation was a little below normal west of the Main Range, but above normal to eastward.
CLIMATOLOGICAL DATA.

MONTANA SECTION

WILLIAM T. LATHROP, Meteorologist

U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CHARLES F. MARVIN, Chief.

HISTORICAL SOCIETY OF MONTANA

WEATHER BY MONTHS.

January opened in a general cold wave carried over from December, 1923. Customary oscillations followed, with no close approach to the very low temperatures of the first few days. The month ended with mild weather. Precipitation was light.

February had but one brief interval of zero weather—on the 19th and 20th. Limited oversteppings of these dates were offset in other sections by failure to sink at all to zero. It was a remarkably mild month. Precipitation slightly exceeded the normal, but the average snowfall was less than 5 inches.

March was a cold, cloudy month, with precipitation well above normal and more snow than in any other month of the winter. There was very little subzero weather. The highest temperature, 58°, was lower for the State than previously since 1895.

April nearly escaped zero weather. It was a moderately cool month, however, and deficient as to precipitation. Such precipitation as was received was fairly well distributed, except that there was little west of the Divide after the 20th.

May averaged 3.3° below normal in the eastern division, 1.6° below in the central, and 4° above in the west. Each division reported minimum temperatures below 20° and maxima above 90° during the month. Rainfall was the highest of any May.

June rains in the north and in southeastern locality gave a small excess over normal precipitation for the State, but not enough rain fell to meet urgent needs in other portions of the State. The month was a cool one, nearly three degrees below normal. A remarkable snowfall occurred in the northwest, where Columbia Falls, on the 7th, recorded 14 inches. Freezing temperatures occurred in western localities.

July, warmest month of the year, had mean temperatures below normal over the greater portion of the State, and a pronounced shortage of rain. Minimum temperatures below 92° occurred.

August showed declining temperatures and a continuation of relatively dry weather. Montana's highest temperature of the year, 110°, was registered at Roy, Fergus County, on the 27th. Killing frosts damaged vegetable growth in numerous localities.

September in the east was below normal but warmer than in the other divisions, which were below normal. Precipitation was about half an inch less than normal, yet rain and snow interfered considerably with threshing, field work, and hauling.

October presented very pleasant autumn weather over most of Montana. Temperatures were well above normal, and weather conditions generally favorable for fall work. Precipitation was above normal in the east, but continued below in the west.

November ushered in the first below zero temperatures of the season in a cold wave on the 13th and 14th. The mean temperature was below normal east of the Main Range and above to westward. Precipitation departures changed to an excess of 0.76 for the month west of the Divide, with a deficiency in the east.

December, coldest of all December in the record, was mild until about the end of the first week, when below zero temperatures appeared in the north. Moderately cold weather spread over the State during the next day or two, but on the 10th there was a return to mildness which continued until the 14th. This warm interval was suddenly broken up by the onset of a cold wave of extreme severity which rapidly covered the State, with exceptionally great falls in temperature, gales, and severe blizzards. Cold weather lasted generally until the last few days of the year, and in some sections to and beyond the 31st, carrying the December mean temperature lower than ever before, notwithstanding the warm weather of the first two weeks. Precipitation was more than normal except in the west.
"In The Beginning"

Montanans are a history minded people. Even a cursory survey of the shelves of any major library in the state reveals a wealth of books dedicated to telling the Montana story or some portion of it. The Montana Historical Society, founded in the state’s earliest days, bulges with artifacts and documents from the Big Sky Country’s past.

The classic tales of the Treasure State, such as the Vigilantes, Gold Rush days, conflicts of the Copper Kings, the early days of statehood, trappers and cowboys along with the discovery and development of the grand Yellowstone region have been told and retold.

However, there are at least two areas in Montana history that have not been adequately reported by historians: transportation and communications. While this treatise will not attempt to document all aspects of the state’s communications industry, we will focus on at least some of the more significant events in the history of radio and television broadcasting within the past seventy-five to eighty years.

Very little is in print concerning Montana’s broadcasting stations. Ronald P. Richards, in his master’s thesis at the University of Montana, documented the early days of the Treasure State’s broadcasters, but the work was not published and therefore was not circulated. Brier and Blumberg devoted two chapters to broadcasters, but both simply began to scratch the surface. Malone and Roeder, in their monumental work, assigned two paragraphs to broadcasting, mentioning two pioneer radio stations and one early television outlet.

While this work is by no means exhaustive, an attempt will be made to document Montana broadcasting’s post World War I evolution, as well as the advents of FM and TV following the Second World War, along with the many and varied developments of the present era.

At the close of 1995, government records showed 138 broadcasting stations (AM, FM and TV) in Montana, including construction permits at various points. This is in sharp contrast to the days sixty years ago when radio stations existed only in the major cities, each community able to support only a single broadcast outlet. Montana was the last state in the
Union to be authorized an FM station, yet when its first AM (KDYS) began, only 38 others were on the air in the United States.\(^6\)

No one knows when the first radio signals originated in the state. In the years between 1916 and the early 1920s, various radio experimenters or amateurs, both licensed and clandestine, filled the airwaves with an assortment of squeaks, squawks, whistles and whines, and on occasion, some music or speech. It was a wide-open era, and the Federal government had just started controlling communications, but had little, if any authority to enforce regulation of the new medium called radio.

However, radio historians have determined that experimental radio signals were sent from an area near Stevensville as early as 1919. Ashley C. Dixon, a local banker who had moved from Chicago, reportedly set up a radio transmitter at his Ravalli County home near the "Three Mile" Trading Post and was broadcasting local musical talent and talk. This endeavor was short-lived and came to an end when Dixon moved to Spokane. The station, like many others of its time, was never licensed and no records were kept of the broadcasts.\(^7\)

Other unlicensed broadcasters followed in Dixon’s footsteps all across Montana.

The history of Montana is vague concerning many of the early-day licensed stations. Then, as now, the Federal government kept no records of deleted facilities, and it fell to the newspapers to document pioneer broadcast endeavors and record them for posterity. Unfortunately, the papers seldom mentioned anything except their own broadcast undertakings.

From the beginning, broadcasting in Montana has been different! The immense distances and small population made both radio and TV a real challenge. In a state with an area of 147,138 square miles and less than one-half million population, radio began in the 1920s on very shaky and unstable ground. Only Alaska offered a greater challenge to broadcasters.

An early-day radio map indicated there were several stations on the air in the years around 1922. The map showed KFBB at Havre, along with KFBF at Butte and KFCH in Billings. KFBB was reportedly licensed to the "Butte School of Telegraphy," but nothing else is known about the school or station.\(^8\) There have been reports of a KFBA operating at Butte in the 1920s, but this was probably a misprint of the KFBB call letters. KGIR was the first permanent radio station in the Mining City.

KFCH, a station promoted by the Billings Gazette, began November 7th, 1922 and lasted at least into the following month when all references to the station disappeared from the newspaper's radio page.\(^9\)

About the same time, the call sign KFED was issued to the Billings Polytechnic Institute (now Rocky Mountain College) for an experimental station.\(^10\) It is doubtful the station ever broadcast more than test programs in the form of phonograph records for the benefit of students who built radio receivers in a class at the Institute.

Controversy has arisen in recent years concerning the "first" radio station in Montana. Today, KEIN at Great Falls (formerly KFBB) uses the slogan, "Montana's First Radio Station," and letterheads for KFBB carried this motto for many years. Available documentation indicates KFBB/KEIN is the oldest station in the state, but was not the first.

The claim has been made that a station using the call letters KFDO, operating out of Bozeman, was the first in Montana, but little or no real documentation has been offered. The station reportedly received responses "from every state in the Union," and was "operated by Everett Cutting who acted as engineer, business manager, trouble shooter and announcer."

Several old-timers in the Bozeman area recall that in the early '20s, a station was operating out of the living room of a fellow who lived in the Sourdough section of Bozeman. This station reportedly used the call sign KBOZ, but no records have been found to indicate it was ever licensed. There is a possibility the early-day KBOZ was the successor to KFDO.\(^12\)

Nearly every Montana city had some sort of pioneer broadcasting station. Most of them were never licensed and ceased operation after a short time. A clandestine station operated out of the Wilma Building in downtown Missoula, sometime in 1923. The station's demise came during a local political broadcast when the participants became so rowdy and obscene the police confiscated the transmitter, put the station off the air and the operators in the county jail. Radio transmitters were simple to build in those years, and many unlicensed stations operated for a short while in nearly all Montana's major cities and towns.

\textbf{+KDYS+}

KDYS at Great Falls, was in every sense, Montana's pioneer broadcast station. Under the sponsorship of the Great Falls Tribune and its publisher, O. S. Warden, KDYS opened officially at 7:30pm on May 19, 1922, to become the first station in the state to be licensed by the Federal Government. Test broadcasts the previous week resulted in a number of reception reports, including one from as far away as Los Angeles.

The actual dedicatory broadcast on the 19th generated reports from the states of California, Idaho, Utah and Nevada, causing the Tribune to boast in the next morning's edition

".........in its initial program, the Tribune's radio station blazed the trail of wireless telephony in the Intermountain states........."
reports came from lonely cabins in the heart of the mountains, where the program was heard plainly.”

Following opening remarks by Tribune publisher Warden, the station offered a musical program that was interrupted by a voltage drop in the city's power system. There were also problems with some of the hastily constructed receivers around the city.

In spite of the early problems, KDYS went on a regular schedule the following day, Sunday the 20th, that featured a service from First Christian Church in Great Falls in the morning, and a bedtime story program at 7:45 in the evening. Both programs became mainstays in the new station's schedule for its 18 month lifetime.

The daily schedule was always abbreviated by modern standards, but featured many "live" programs that originated in the KDYS studios at the Tribune office building, where the customary "flat top" antenna was perched on the building's roof, between two poles. At times, the city's phone system was over loaded by listeners calling in requests to the performers.

KDYS, along with KFBB at Havre, which began in the fall of 1922, broadcast one of the first "remotes" in Montana radio history. Both stations aired the Dempsey-Gibbons boxing match that was staged in Shelby on July 4, 1923. However, this was no co-operative effort. Each station sent staff members to the fight scene, and the individual broadcasts were sent to the respective stations over telephone lines.

While KDYS operated only three or four days a week with accompanying promotion and program schedules in the Tribune, the offerings were very consistent until about October 1, 1923. Then, the station, for all practical purposes, ceased broadcasting due to equipment problems, spawned by the lack of components for the transmitter. About this time, the Tribune announced the station would be silent about 10 days "for repair." On November 25, a news story clearly indicated the station might return in six months, but cautioned that the resumption of the broadcasts would "depend upon the state of affairs in the radio world."  

KDYS never returned to the air, and Great Falls did not see the resumption of local radio until September 1929 when KFBB moved to the city from Havre. However, this short-lived endeavor made the residents of the Electric city aware of radio and paved the way for KFBB and others.

The Tribune did not venture into radio again until 1948 when they were part of the endeavor that spawned KMON. Had KDYS prospered and remained on the air, Montana radio history might have been very different. KFBB probably would not have moved to Great Falls, and may have been the station that perished instead of KDYS. As Great Falls' pioneer radio station, KDYS might have ventured into television in the 1950s in place of KFBB. However, speculation profits little. The KDYS call sign was never used by another station in the U-S-A.

Newspaper ownership of radio stations was a pattern that began early in the history of Broadcasting in the United States and has continued into modern times. Some examples are: WGN (Chicago Tribune), WQXR (New York Times), KSD (Saint Louis Post-Dispatch), KRON (San Francisco Chronicle), WMT (Waterloo, Iowa Morning Tribune) and KOWH (Omaha World-Herald). In Montana, it was not a popular combination except for the Tribune's early association with KDYS and their later affiliation with KMON, along with the Miles City Star's ownership of KRJF (later KATL).

+KFBB+

In October of 1922, several months after the beginning of KDYS, F. A. Buttrey opened KFBB at Havre on the top floor of his department store. The home manufactured transmitter had a rated power of fifty watts and fed the antenna atop the store.  

The station's first broadcasts were intermittent, but once things got on a regular schedule, it was credited with having been "constantly in service for more than 2,600 days, a record unequalled by few stations." The first broadcasts were mainly weather and market reports, along with some music, mostly on phonograph records.

Buttrey moved KFBB to Great Falls in 1929. He believed the larger market would offer more opportunity for service and station revenue. Havre did not have local radio service again until 1947 with the advent of KOJM.

In spite of contrary predictions, Buttrey's station prospered in Great Falls, and became an integral part of the community and area. For a time, the relocated station maintained studios at the old Park Hotel in downtown Great Falls, a site that was later used by its first competitor, KXLK. The two steel towers were erected on the hotel roof, with the station's "clothesline" antenna strung between them. In later years, when the studios were moved to the First National Bank building, the transmitter was located west of the city on the Vaughn highway. A residence next door to the transmitter building served as a home for the station engineer.

In 1936, after many years of offering either locally produced or syndicated programs on acetate discs, KFBB became a part of the Columbia Broadcasting System (CBS), and maintained that affiliation until 1961, when the management felt the station was "tied too close" to the network. In the years between, KFBB kept high standards of local programming, and developed its famous "Farmer's Noon Hour," which is discussed in another section of this treatise. For a while, in the years before network affiliation, KFBB produced its own soap-opera. It was entitled "Frank and
A Chronology Of Montana Broadcasting

1919 Charles Ashley Dixon broadcasts music and talk from his home near Stevensville.

1922 KDYS, Montana’s first licensed station begins broadcasting on May 17 from the offices of the Great Falls Tribune. In October, F.A. Buttre begins KFBB in his store at Havre. KFCH begins on November 7 under sponsorship of the Billings Gazette. An educational license is issued the same day to KFED at Billings Polytechnic Institute. KDFO operating at Bozeman. KFCH ceased broadcasting on December 10.

1923 Montana’s first “remote” broadcast, the Dempsey-Gibbons prize fight was broadcast on both KFBB and KDYS from Shelby on the Fourth of July. KDYS ceased broadcasting sometime in the fall. An unlicensed station broadcasting at Missoula with numerous other clandestine operations on the air across the state.

1925 KUOM at Missoula begins on February 17 from the University of Montana campus on 1230 kHz with 250 watts.

1926 KGCX begins occasional broadcasts on October 5 from the First State Bank at Vida.

1927 March 21, KGEZ opens at Kalispell with a basketball broadcast.

1928 June 8, Charles Campbell starts KGHL at Billings, using the slogan, “The Northwestern Auto Supply Company Station.” The first day of broadcasting features a remote broadcast from the governor’s office in Helena. On September 24, KUOM broadcasts a speech by presidential candidate Al Smith.

1929 F.A. Buttre moves KFBB from Havre to Great Falls. January 21 E.B. Craney opens KGIR at Butte. August 21, KGCX moved to Wolf Point and power increased. October 31, KUOM ceases broadcasting and license is allowed to expire. Missoula without radio service.

1931 On January 17, KGVO begins broadcasting from studios in the Union Block (later Radio Central Building) in Missoula.

1936 KFBB increases power to 5,000 watts and joins the Columbia Broadcasting System. KGVO affiliates with CBS the same day.

1937 KPFA begins at Helena on October 1st. KGIR and KPFA form the Z Bar Network. KGIR moves to Nissler Junction and increases power to 5,000 watts. White’s Radio Log lists KGIR as being “near” Butte, Montana.

1939 October 15, KBRB opens at Bozeman and becomes the third station in the Z Bar Net.

1941 KRIF (1340) begins at Miles City on September 4th. World War II puts a freeze on any new stations or expansion.

1946 On September 8th, KBMY (1240), Billings’ second radio station and Montana’s first post-war station begins. KANA (1230), Anaconda November 6th, featuring a part-time hook-up with KGVO. KGCH and KRJF join Mutual (MBS).

1947 Montana’s post-war radio boom begins as new stations sign-on the air: KPRK (1340), Livingston, January 10th; KBOY (1490), Butte on February 14th; KXKL (1400), Great Falls (fourth station of the Z Net; KXLO (1230), Lewistown on June 24th; KIYI (1230), Shelby on August 4th and KXLL (1450), Missoula (fifth station of the Z Bar); KOJN (730), Havre begins October 31st followed by KAVR (1340) a few weeks later in the same city.

1948 Three new stations in Montana: KMON (560), Great Falls starts on May 30th; KOPR (550), Butte, June 9th and KXGN (1400) at Glasgow on September 23rd.

1949 KBMN (1230), Bozeman begins September 14th and KDFW (1340), Helena in October.

1950 Palatial downtown studios of KGVO burn on February 10th. KLCB (1230), Libby starts December 23rd.

1951 Fairmont Corporation, a subsidiary of the Anaconda Company, attempts to purchase KFBB. A flood of protest follows. Fairmont seeks dismissal of the application to purchase. KOOK (970), Billings, begins March 20th with 5,000 watts and brings CBS to Eastern Montana.

1953 KXLF-TV (Ch.6), Montana’s first TV station begins at Butte on August 14th, followed by KOPR-TV (Ch.4) on August 28th. KOOK-TV (Ch.2) begins in Billings on November 9th.

1954 KFBB-TV (Ch.5), Great Falls starts March 21st. KGVO-TV (Ch.13), Missoula opens July first. KLTZ (1240), Glasgow on the air August 14th. KOPR-TV closes September 20th.
STEER'S HIDE WITH ROOSEVELT BRANDS TELLS TALE OF HIS DAYS ON THE RANGE

When Theodore Roosevelt died, one of the possessions that he valued most highly hung in his trophy room at Sagamore Hill, his home near Oyster Bay. It was a certificate of ownership of his old Montana cattle brands, which were borne by many a steer on the eastern Montana cattle ranges in the 80's when Teddy was a stock grower and a member of the Montana Livestock Association. Below the certificate was stretched on the wall a fine steer's hide bearing the two Roosevelt brands—an elk horn on the right ribs and a triangle on the left.

The story of these relics of Roosevelt's old range days is an interesting one to every Montanan, for it had to do with a little act of kindness and thoughtfulness that touched the Colonel deeply and more than ever cemented the bond of affection that bound him to this state, where some of the finest days of his life were spent.

It will be remembered that some years ago the Montana legislature passed a bill that obliged all owners of stock brands in the state to record them. This was done to clear the records of old or unused brands, the accumulation of which had made such action necessary.

Frank B. Linderman, now of Somers in Flathead county, was at the time living in Helena, and one day while he was out at the capitol, D. W. Raymond, the wide-awake secretary of the Montana Livestock Association, happened to mention to Linderman that Colonel Roosevelt's Montana brands would pass into the hands of strangers unless he recorded them as required by law.

"Leave that to me," said Linderman. "Teddy was a charter member of the Montana Livestock Association and he wouldn't want to lose his old brands."

Linderman, therefore, proceeded to pay the small fee necessary and thus saved the ownership of the brands in the name of the man who loved Montana first among all states. In the union and said so. But he did not stop there. In order to express appreciation for Roosevelt's Americanism and his old association with Montana, Linderman bought a splendid beef hide from a furrier. It was a beauty and had never been branded. It had been tanned "with the hair on," and the furrier was instructed to cut the critter's tail from the hide and substitute a buffalo tail in its place.

Going to Gilman Bullard of Helena, Linderman secured his services in burning the Colonel's brands on the "hair side." Then with a hot point, Bullard burned a loop of rawhide rope around the hide on the "flesh side" as a border, running the design of the rope through a "hondo" and off the hide after making a circle around the border. At the top of the robe was a brand, "U. S. A."

You bet we know ye, Teddy, like the hinbourn knows his pack; Ye're marked an' easy readin',

We know ye like the puncher
Knows the iron he's ridin' fer;
Like the Injins know the sign-talk.

We know ye like the blue-coat
Knewed the Springfield, forty-five;
Like the pack-mules knewed their bell-mare,

A gun that snaps is p'ison,
Like a friend ye call in vain:
We're bankin' on ye, Teddy,
Per a trail that's straight an' plain.

In drittin' on the ranges
With Princes ridin' herd,
Ye were yer brand a-gleamin'
An' they didn't git it blurred.

Ye smoked yer pipe in line-camps
Of outifts on yer way,
An' shortely rode the circle
Per the U. S. A.

Following the above was an arrow pointing to the buffalo's tail that had been sewn to the robe, with this explanation:

THE TALE

I know ye're as wise as an Injin
In the ways of the camps an' the trail,
But here on this hide is the tale of the range:
It begins and it ends in the tail.

"I sent the robe to Colonel Roosevelt as a certificate of ownership of the old brands and received a splendid and characteristic acknowledgment from him," said Linderman. "He said it was 'perfectly bully.'"
ROOSEVELT AND THE STOCKMEN'S ASSOCIATION*  
By Ray H. Mattison  

INTRODUCTORY NOTE

This report is one of the research studies made by the writer for Theodore Roosevelt National Memorial Park. It was written in answer to the question, "What were Theodore Roosevelt's relations with the stockmen's associations in western Dakota and Montana during the years he spent in the Little Missouri region?" Some of the material in this report appeared recently in "Lessons in Democracy in the Badlands of North Dakota," The North Dakota Teacher, April-May, 1949 by the late Regional Historian Olaf T. Hagen, National Park Service.

In preparing this monograph, the writer wishes to express his deep gratitude to Mr. Russell Reid, Superintendent, State Historical Society of North Dakota, and the members of his staff for their generous assistance; also to Mrs. Lucinda B. Scott, Librarian, and Mrs. Anne McDonnell, Assistant Librarian, of the Historical Society of Montana: Mr. Wallis Huiddekooper, past president, and Mr. E. A. Phillips, Secretary, Montana Stockgrowers Association, both of whom are very much interested in the history of the organization, have also been most cooperative in helping the writer obtain information.

No other person associated with the Badlands of the Little Missouri River has received more attention from biographers than the late president, Theodore Roosevelt. Much has been written about the brief periods he spent in that region as a rancher. His skills as a cowboy, hunter, naturalist and general outdoor man have been subjects for much speculation. He has, in short, become very much of a legendary character. In spite of the fact that several books have been written about Roosevelt in the Badlands, his many activities there remain somewhat obscure. In the words of one writer, Roosevelt's years as a rancher have given the Little Missouri region "a fame inversely proportionate to their importance in the history of the cattle frontier."

*This paper by Ray H. Mattison, Historian of the Theodore Roosevelt National Memorial Park, is published through the courtesy of the National Park Service.