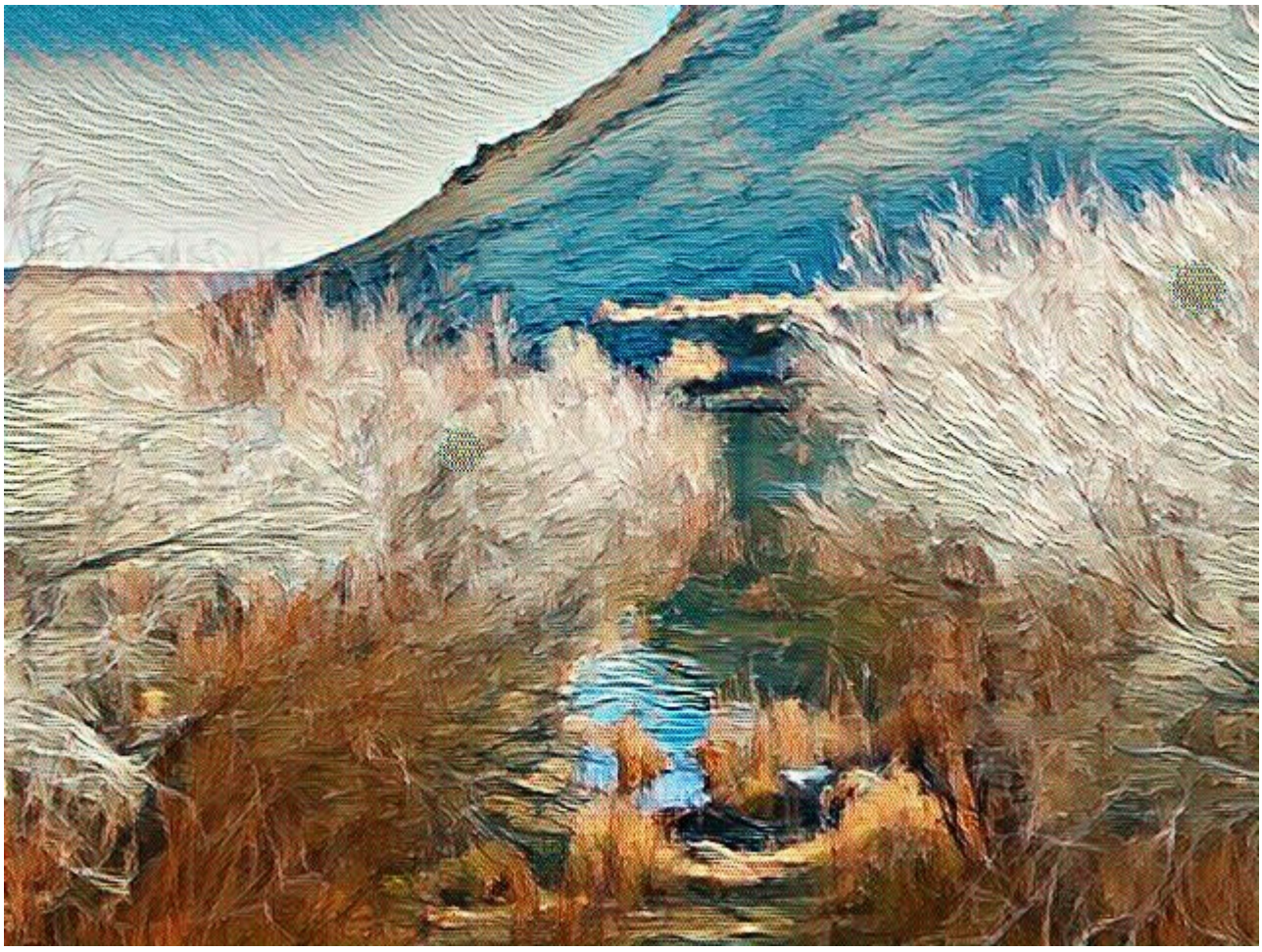
CROSSROADS



Canyon County Parks, Cultural & Natural Resources

2021.1: The Education Issue

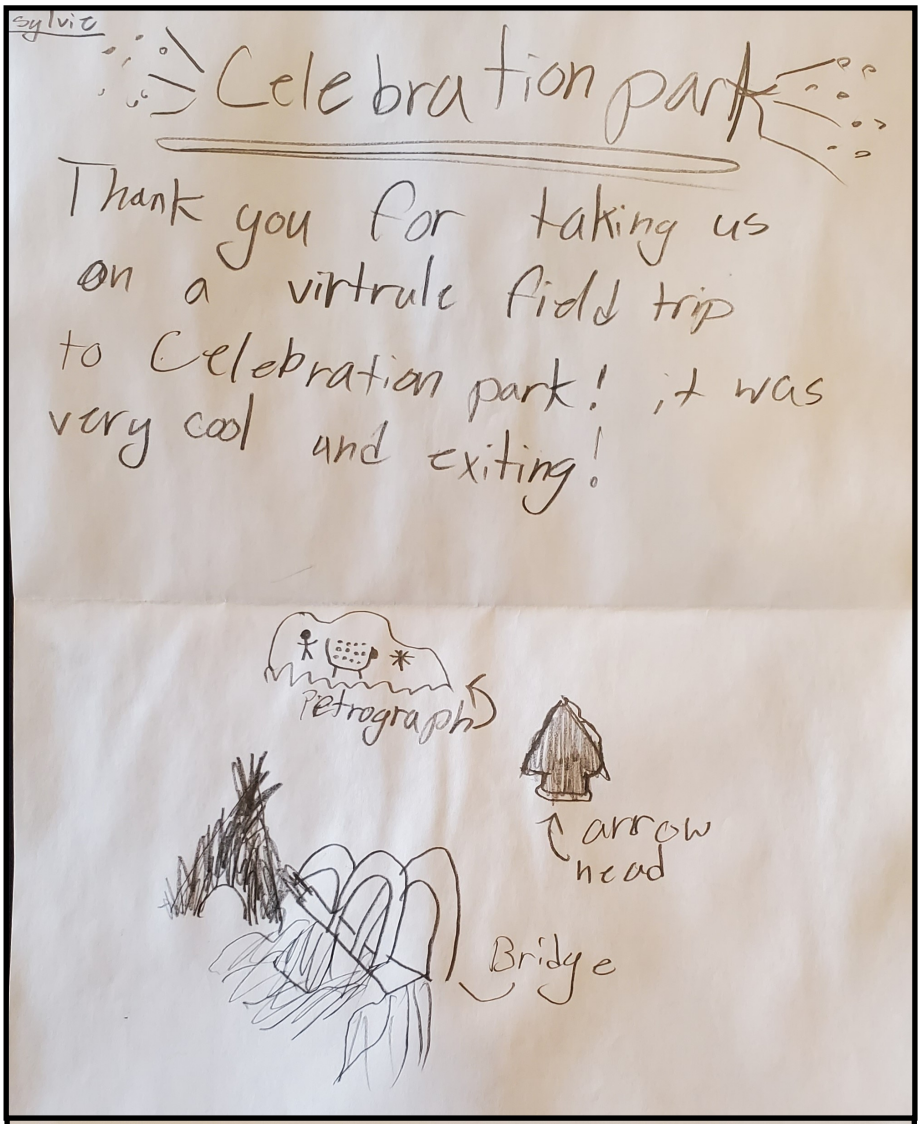
In This Issue

CANYON COUNTY
Parks, Cultural & Natural Resources

www.canyonco.org/parks

Front Cover: Juli McCoy

Back Cover: Juli McCoy



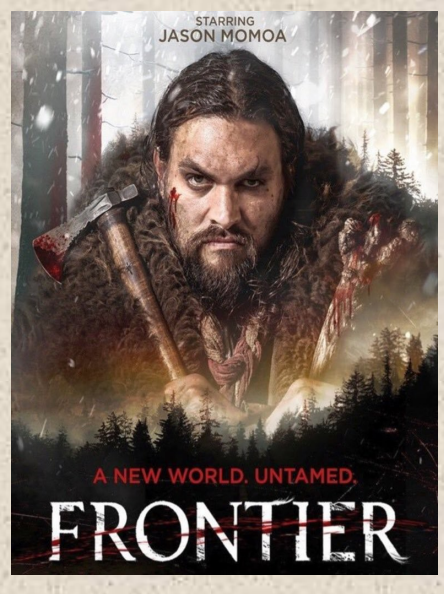
FROM THE DIRECTOR:

IS 'FRONTIER' A MODERN DAY ANACHRONISM ?

The Rocky Mountains: emigrants crossing the plains / F.F. Palmer, del. ; Currier & Ives lith., N.Y.

Frontier. This is a word we don't often reference these days. It's a word that probably brings to mind one of three different ideas: the settling of the Old West in America conjuring images of the 'wild frontier' being tamed by frontiersmen; Jason Mamoa in the series *Frontier* about the 1700 fur trading and the Hudson Bay Company; or you're hearing the introduction of Star Trek and images of the Enterprise flying through galaxies. *'Space, the final frontier. These are the voyages of the Starship Enterprise. It's five year mission; to explore strange new worlds; to seek out new life and new civilizations; to boldly go where no man has gone before.'* Frontier is beyond the known. Frontier is wild. Frontier is 'first contact.' It belongs in the past, in the Wild West, or it belongs in the future, in space.

Doesn't it?



Definition of Frontier:

- The extreme limit of settled land beyond which lies wilderness, especially referring to the western U.S. before Pacific settlement;
- The extreme limit of understanding or achievement in a particular area;
- A region that forms the margin of settled or developed territory.

Definition of Anachronism:

- A thing belonging or appropriate to a period other than that in which it exists, especially a thing that is conspicuously old-fashioned;
- An error in chronology, especially a chronological misplacing of persons, events, objects or customs in regard to each other.

Applying the word Frontier to modern day America sure seems to fit the definition of an anachronism, right? That term applied today would seem out of time and place (like the pictures to the left and below). We have settled everywhere there is to settle. We have colonized the 50 states plus territories like Guam and Puerto Rico. Doesn't seem like there'd be any new cultures to discover in America, no land that hasn't been claimed and explored. Everything has been surveyed, mapped, and ownership is well documented.

In writing the article the article *'Initial Point, Land Survey and the Myth of the Metric'* (pages 16-21) I discovered that while Frontier would seem like an anachronism in America today – and arguably in some ways it is – the term Frontier is actually still applied to many places in the U.S., including a lot of Idaho. We're used to hearing the classifications of urban and rural. Urban means "related to a city" and rural is the opposite, meaning "relating to the countryside" rather than the city. We think of these terms as the two ends of a spectrum. It turns out that for some modern agencies, the spectrum continues from urban, past rural into the frontier.

In the U.S. today, 'frontier' areas are defined as ***"the most remote and sparsely populated places along the rural-urban continuum, with residents far from healthcare, schools, grocery stores, and other necessities."***

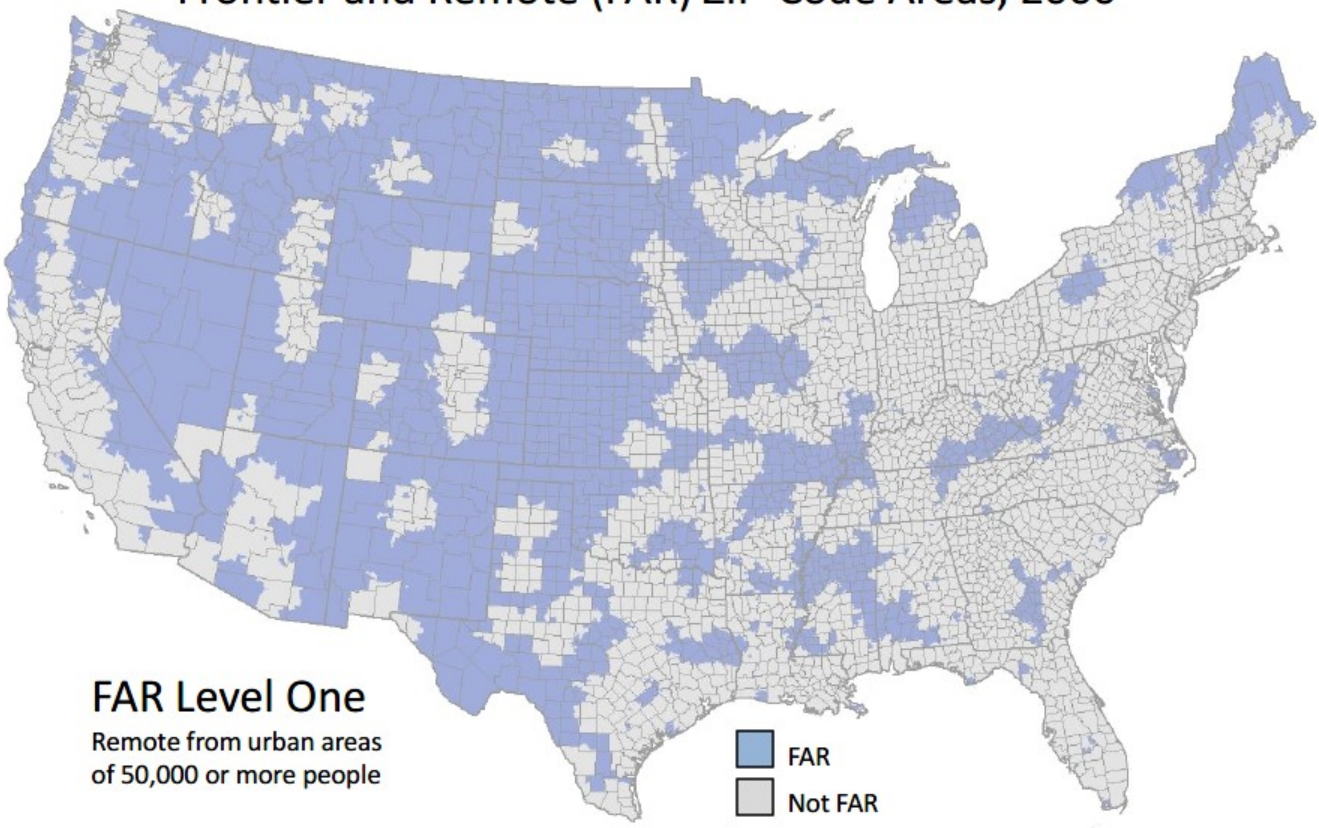
The use of the term frontier in modern American means an area is far from modern resources. Areas of the country are still in fact classified as frontier, like areas of Idaho. (Let's face it, there are areas in Idaho that probably have more badgers per square mile than people living there.) The term frontier as used today in the U.S. is often further defined as ***counties having a population density of six or fewer people per square mile***, though definitions can get much more complex than this and even have varying degrees of 'Frontier'. Some organizations use the term **Frontier and Remote (FAR)** and assign four levels since rural areas experience degrees of density and remoteness; FAR Level One is remote from urban areas of 50k or more, FAR Level Two is remote from urban areas of 25k or more, FAR Level Three is remote from urban areas of 10k or more, and FAR Level Four is remote from urban areas of 2.5K or more people.

The next time you find yourself driving through the 'middle of nowhere', now you know that you're probably driving through an actual frontier—a modern day frontier. ■

~ Nicki ~

(By the way — have you seen the movie *Cowboys & Aliens*? It'll feel like cinematic anachronism.)

Frontier and Remote (FAR) ZIP-Code Areas, 2000



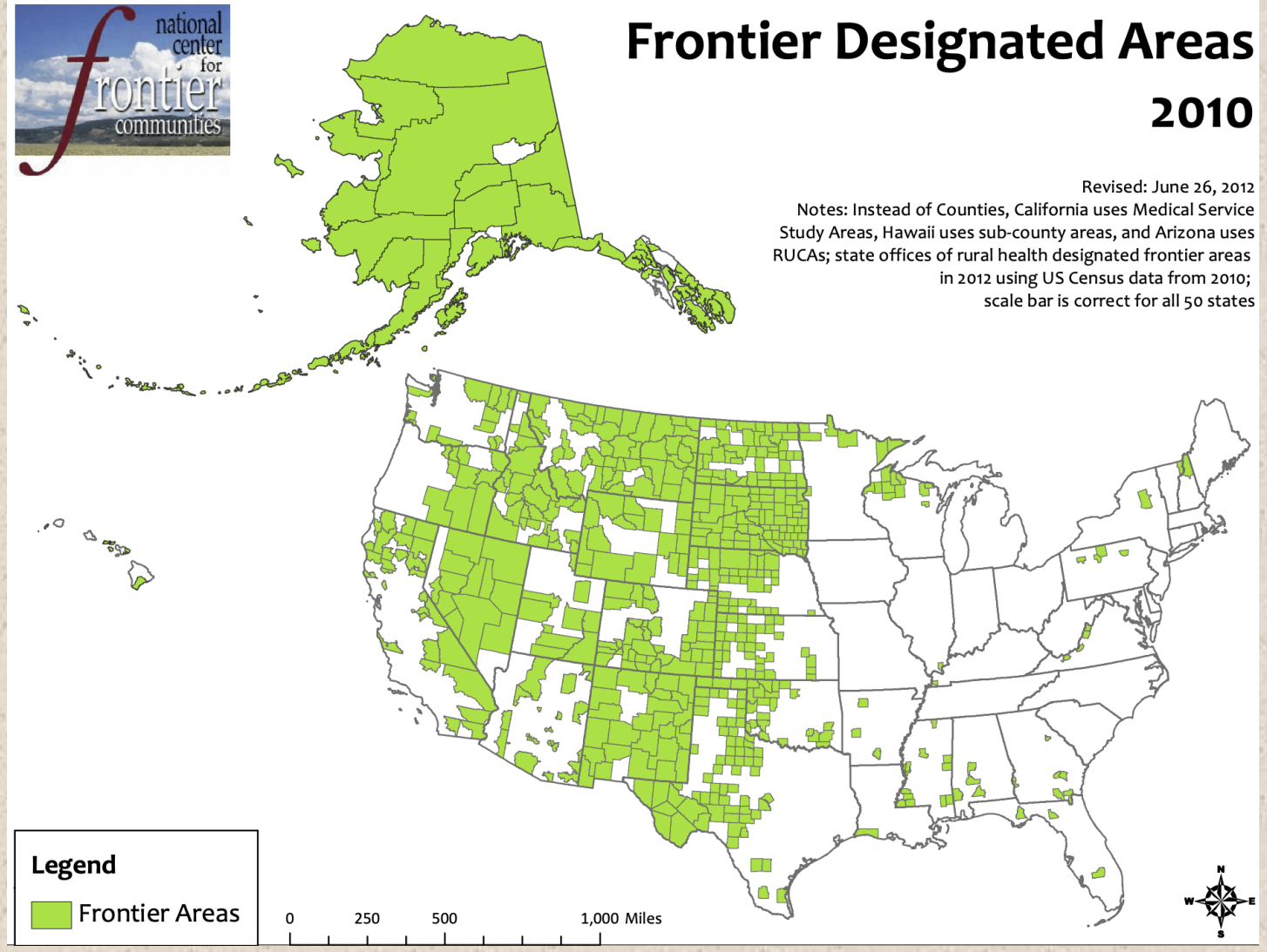
FAR level one includes ZIP Code areas with majority populations living 60 minutes or more from urban areas of 50,000 or more people.

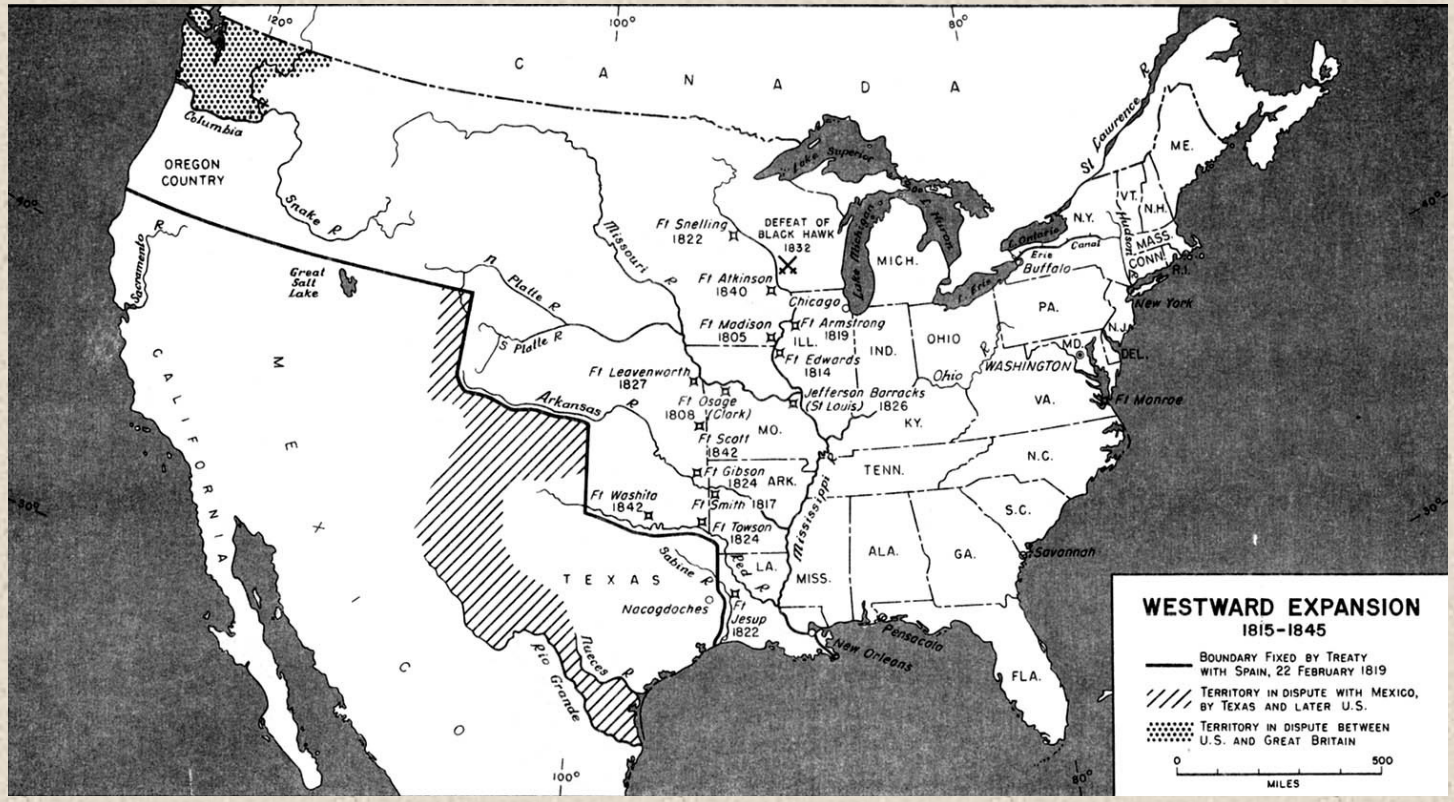
Source: Economic Research Service, U.S. Department of Agriculture, using data from the U.S. Census Bureau, the Center for International Earth Science Information Network, and ESRI.

national center for frontier communities

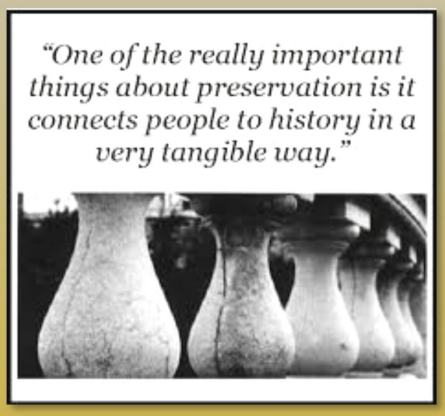
Frontier Designated Areas 2010

Revised: June 26, 2012
Notes: Instead of Counties, California uses Medical Service Study Areas, Hawaii uses sub-county areas, and Arizona uses RUCAs; state offices of rural health designated frontier areas in 2012 using US Census data from 2010; scale bar is correct for all 50 states





FY2022 Canyon County Historic Preservation Grant Timeline



Fiscal Year 2022 Grant Application Timeline

February 9th, 2021: Grant Workshop

- Provide instructions and overview of application process
- Provide advice and answer questions
- Applications will be available *after* this meeting

Completed ☑

February-April 2021: HPC will offer advice, answer questions and review draft applications

April 30th, 2021: Applications due by 5pm!

Via Mail: Canyon County
ATTN:BOCC/Jenen Ross
1115 Albany
Caldwell, ID 83605

OR Via Email: ***jross@canyonco.org***

"A CONCERTED EFFORT TO PRESERVE OUR HERITAGE IS A VITAL LINK TO OUR CULTURAL, EDUCATIONAL, AESTHETIC, INSPIRATIONAL, AND ECONOMIC LEGACIES - ALL OF THE THINGS THAT QUITE LITERALLY MAKE US WHO WE ARE."

STEVE BERRY

May 11th, 2021 HPC Meeting: HPC will review applications

June 8th, 2021 HPC Meeting: HPC decision on funding *recommendations* to the Board of County Commissioners

Upon approval of the Canyon County FY22 budget notice of awards will be announced. Agreements will be mailed in October 2021.

All organizations interested in applying for FY2022 historic preservation grants that have questions can contact
Juli McCoy: *jmccoy@canyonco.org*
Nicki Schwend: *nschwend@canyonco.org*

INITIAL POINT, LAND SURVEY AND THE MYTH OF THE METRIC

If you drive south from Kuna on Swan Falls Road towards the Snake River (past Kuna Cave Rd.) you'll notice a small but distinct volcanic butte on your left-hand side (east side, roughly 8 miles south of Kuna). This butte is labeled with a sign saying 'Initial Point.' If you follow the short dirt road east to the butte you'll further notice that the top of the butte has been improved with a stairway and hand railings leading to a viewing platform with a plaque noting its establishment in April 1867. Arriving at the top of the butte you'll find a survey **benchmark monument** embedded in the rocks - a relatively small brass or metal disk that provides latitude, longitude and typically elevations (see below). Chances are you've seen similar benchmarks while out hiking, or had the chance to buy versions of them as keychains, magnets, or Christmas ornaments in gift stores or museums. They are relatively common, so why does the benchmark on 'Initial Point' in the middle of the desert south of Kuna deserve a dedicated road, a plaque and a stairway to get to it? The short answer… it's the single most important dot on the map for all of Idaho, and especially for anyone owning land.

There are only 37 **'Initial Points'** in the entire US federal survey system, selected as origin points for surveying and mapping out newly acquired lands after the American Revolution. Idaho's Initial Point is the spot from which all cartographic (map) grids and legal land descriptions for Idaho are measured in both direction and distance – all 54 million acres of Idaho. Running North-South through each initial Point is a straight line known as the **Principal Meridian**. In Idaho, the principal meridian is called the '*Boise Meridian*' and it runs the entire length of the state and directly through the town of 'Meridian' which is how the town got its name. Perpendicular to this line is an East-West line known as the **Base Line,** hence the name 'Baseline Rd.'

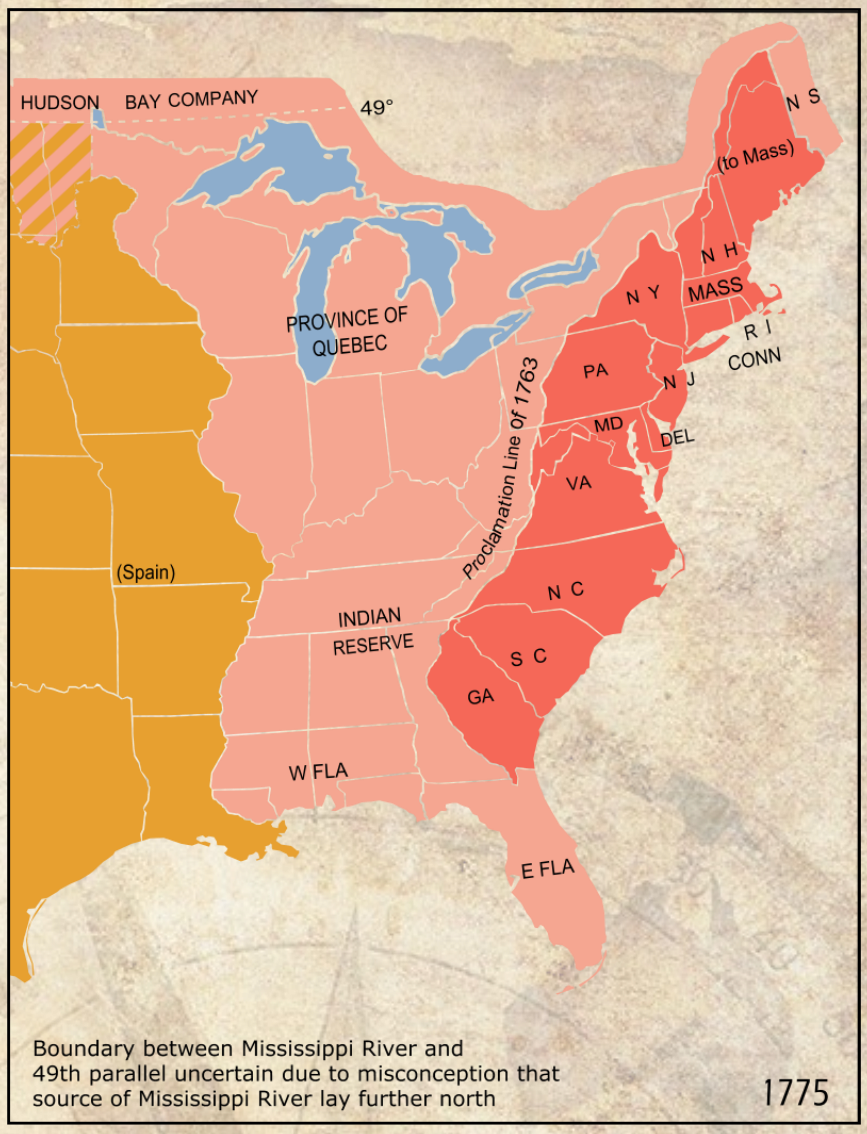
The **Public Land Survey System (PLSS)** is the name for the established and adopted method for surveying and documenting land in the U.S. It is also known as the **Rectangular Survey System** and was created by the *Land Ordinance of 1785*, established to survey land west of the original Thirteen Colonies, that was acquired by the US after the *Treaty of Paris* and the end of the American Revolution. These lands, once surveyed, were to be distributed to war soldiers, and sold to raise money for the country and to pay off war debts. Today the **General Land Office** under the **Bureau of Land Management** oversees this system.

The lands within the area of the original Thirteen Colonies, before the PLSS, continued to use the British system of land survey called **metes and bounds.** This system of tracking land ownership and boundaries uses physical features of the local geography (a tree, lake, stream or river), local markers and hand drawn boundaries with descriptions of distance and directions.

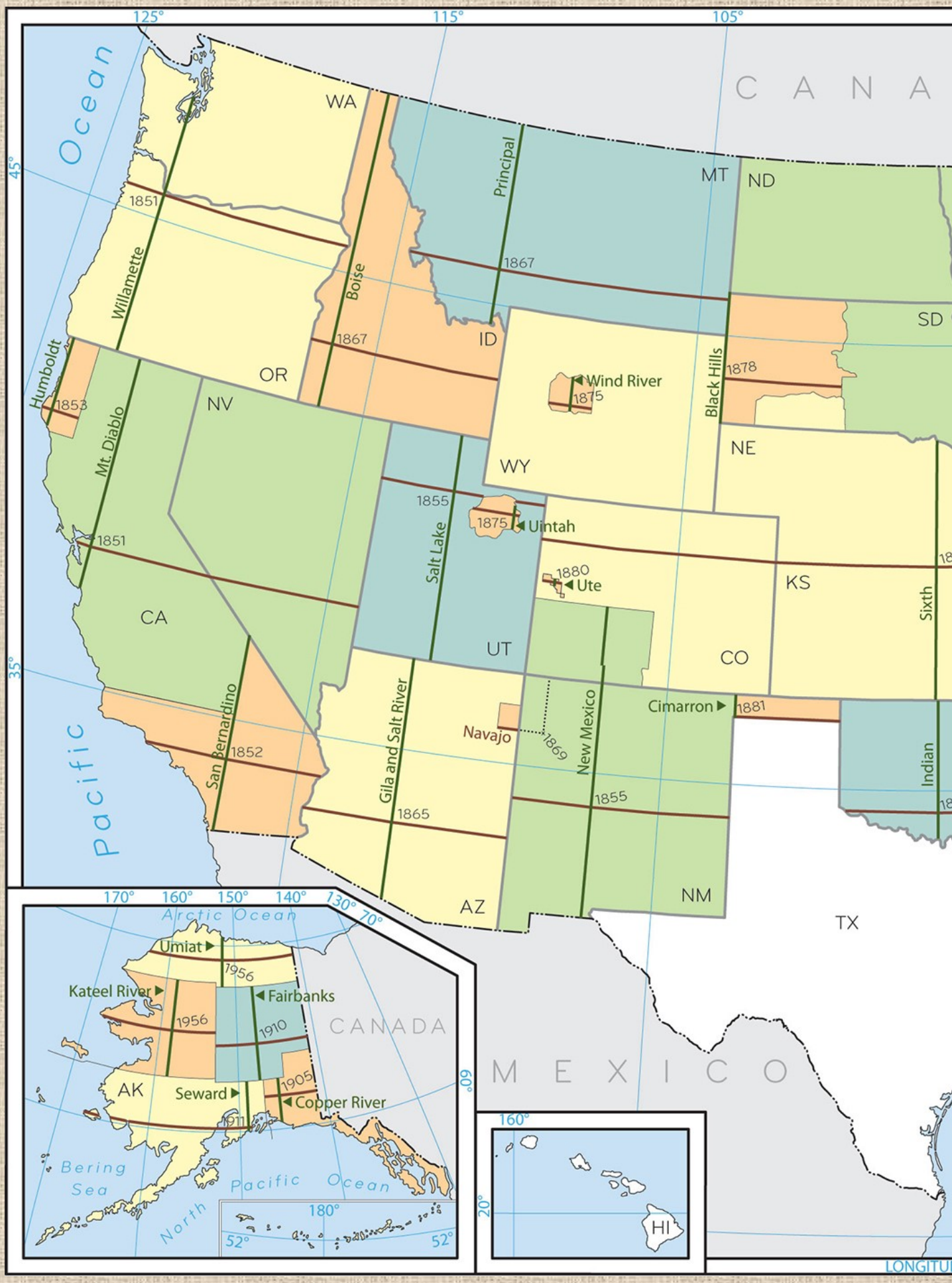
While this system is still used in England and lands with historically English connections, there are inherent difficulties with this system. This system is meant to work on lands already settled by men, not vast tracks of newly acquired lands as the U.S was faced with in 1783. Because metes and bounds were used on lands already occupied by people, boundaries and property lines were often irregular and complex to describe; nothing was systematic or uniform. Over long periods, descriptors in the property lines were subject to change or eradication, such as a boundary marker tree dying or streams drying up, or rivers moving location with natural erosion of their banks. The modern states of Georgia, Connecticut, Delaware, Kentucky, Main, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island , South Carolina, Tennessee, Vermont, Virginia and West Virginia use metes and bounds (see 1775 map right).

A committee headed by Thomas Jefferson created the Rectangular Survey System as a way to systematically survey and distribute the new lands. This system is used today in 30 of the 50 states of the U.S. In addition to the states listed previously, Hawaii has a cultural and historical system in place based on the Kingdom of Hawaii that is still in use today. Texas has a mixed system of early Spanish land grants and the PLSS. There are other examples of mixed historical systems, but the remaining 30 states primarily have a history of the PLSS, Rectangular System.

Take a look at the map on pages 18-19. This map shows the established principal meridians and base lines in the U.S. You'll notice a lot of areas, like Idaho, that have a survey area matching or closely matching the boundaries of modern states. Now, take a look at the area that is Ohio. Ohio was the first test subject of the newly adopted survey system, and it shows. The Ohio lands were broken up into several areas with different initial points, and surveying was accomplished rather hastily in order to sell and distribute land. Moving westward from Ohio, accuracy instead of speed was prioritized and the system evolved to establish one principal meridian (north-south line) and one base line (east-west line) to encompass descriptions for the area of an entire state or larger.



There are 37 unique principal meridians in the PLSS, but if you look closely at the map on pages 18-19, you'll notice that occasionally, different principal meridians share a base line, as is the case with the 3rd Principal Meridian and the 2nd Principal Meridian in the modern states of Illinois and Indiana. Also, look at the single base line for Louisiana, Mississippi, and Alabama. Principal meridians are now linked to their longitudinal reading, as in degrees, minutes and seconds west of the Greenwich Meridian. This prime meridian passes through the *Royal Observatory* in Greenwich, London. Established in 1851, it became the primary meridian reference on navigation charts and maps used by mariners. It was adopted by the *International Meridian Conference* as the official prime meridian due to its popularity. This is the meridian from which modern Global Positioning Systems (GPS) measure locations east or west on a global scale. North and south measurements on a global scale are read as latitude in degrees, minutes and seconds from the equator, and of course are noted for each base line in the PLSS system.


125°
115°
105°
45°
35°
Pacific Ocean
C A N A
WA
OR
CA
NV
ID
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
TX
Humboldt
1853
Mt. Diablo
1851
Willamette
1851
Boise
1867
Principal
1867
Wind River
1875
Black Hills
1878
1855
Salt Lake
1875
Uintah
1880
Ute
Sixth
San Bernardino
1852
Gila and Salt River
1865
Navajo
1869
New Mexico
1855
Cimarron
1881
Indian
M E X I C O
170°
160°
150°
140°
130°
70°
Arctic Ocean
Umiat
1956
Kateel River
1956
Fairbanks
1910
CANADA
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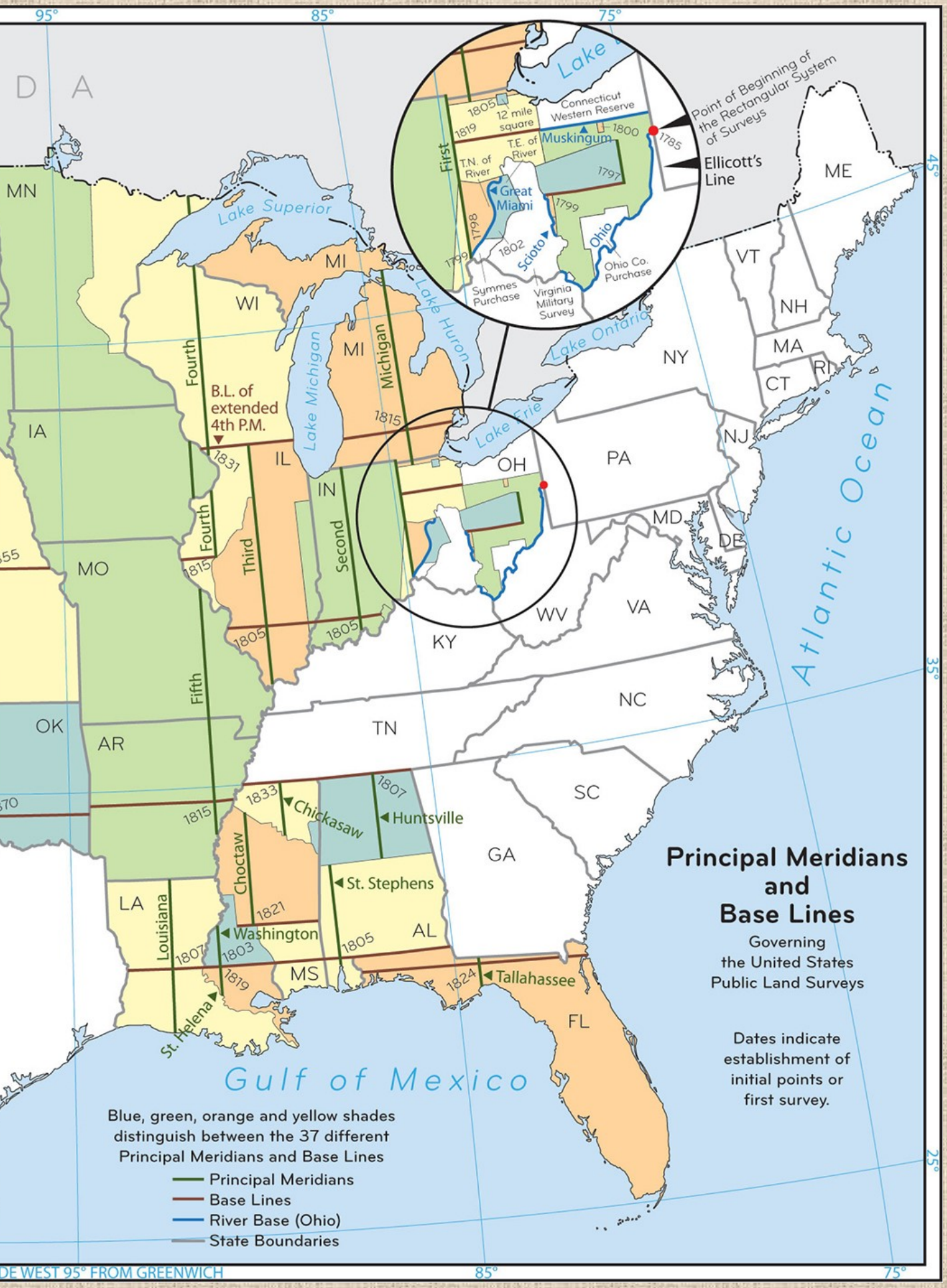
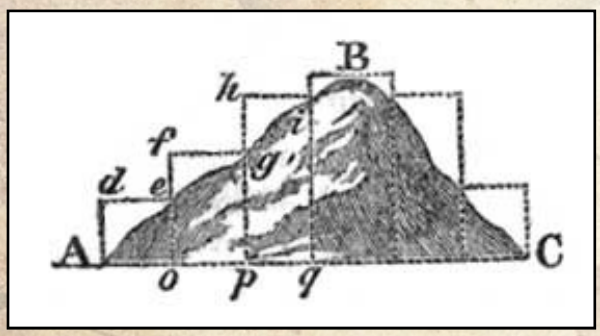

Principal Meridians and Base Lines
Governing the United States Public Land Surveys
Dates indicate establishment of initial points or first survey.
Blue, green, orange and yellow shades distinguish between the 37 different Principal Meridians and Base Lines
Principal Meridians
Base Lines
River Base (Ohio)
State Boundaries
Point of Beginning of the Rectangular System of Surveys
Ellicott's Line
Connecticut Western Reserve
12 mile square
Muskingum
T.E. of River
T.N. of River
First
Great Miami
Scioto
Ohio
Ohio Co. Purchase
Symmes Purchase
Virginia Military Survey
Fourth
Third
Second
Fifth
B.L. of extended 4th P.M.
Michigan
Chickasaw
Huntsville
Choctaw
St. Stephens
Washington
Tallahassee
St. Helena
Louisiana
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
Atlantic Ocean
Gulf of Mexico
MN
WI
MI
IA
IL
IN
OH
MO
KY
WV
VA
PA
NY
ME
VT
NH
MA
CT
RI
NJ
MD
DE
NC
SC
TN
GA
AR
OK
LA
MS
AL
FL
95°
85°
75°
45°
35°
25°

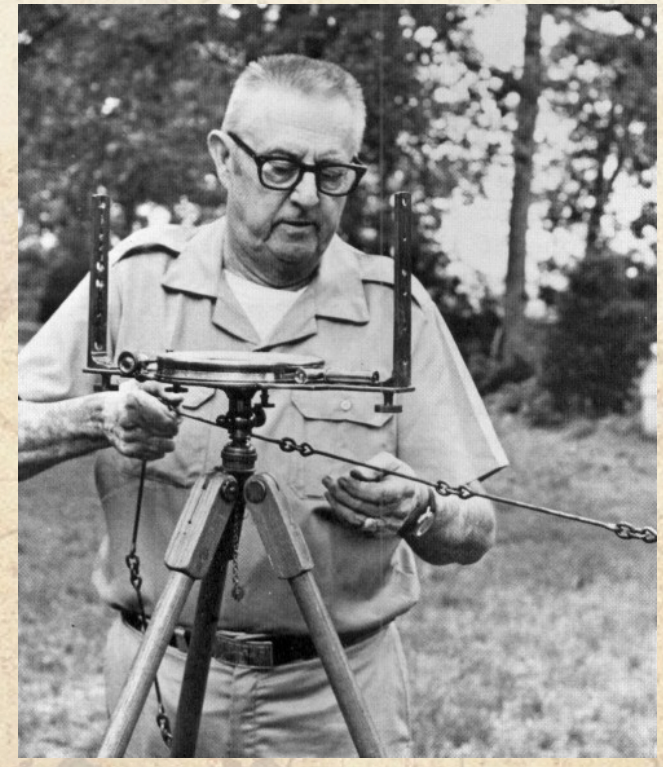
Chainmen of the U.S. Geological survey measuring a baseline near Fort Wingate, New Mexico, 1883. Courtesy Library of Congress.



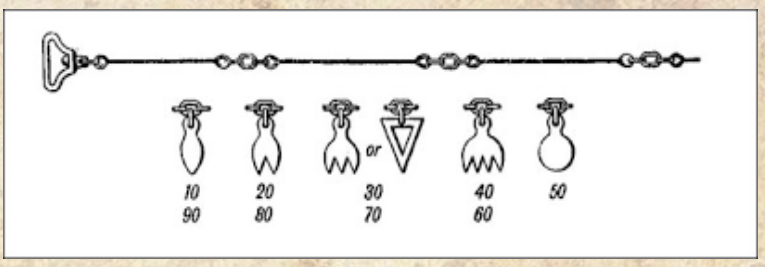
Once initial points were established, on the ground measurements were taken using chains and links, based on Edmund Gunter's 66 foot measuring chain. These chains were made up of 100 links, each 7.92 inches long. Eighty consecutive chains equate to one U.S survey mile. This system required a minimum of two people on-site moving across the land, one on each end of the chain. It also required constant attention to correct orientation or compass bearing to ensure accuracy. These men had to account for elevation changes, needing to keep the chain level. Essentially, their measurements needed to operate 'as the crow flies' (horizontally) and not by actual on your feet distance traveled (which has slope). In other words, a mile on foot up a steep mountain does not cover the same distance across a map as walking a mile across a flat prairie (above).

The United States uses U.S. customary units as a system of measurements since it was formalized in 1832. This means we use feet, inches, yards and miles to measure distances, while the International System of Units (SI), also known as the metric system, uses the meter as the base unit for length with subsequent units increasing or decreasing by powers of ten. This makes for converting and comparing units very simple; 10 millimeters = 1 cm, 10 cm = 1 decimeter, 10 decimeters = 1 meter, 10 meters = 1 decameter, 10 decameter = 1 hectometer, 10 hectometers = 1 kilometer (each next unit of measurement increasing by a power of 10). In comparison, the U.S. customary units, as you know, convert as follows; 12 inches per foot; 3 feet or 36 inches per yard, 5,280 feet or 1,760 yards per mile. Nothing is easy about these conversions.

Currently, the United States is one of only three countries that have not officially adopted the metric system as their standard means of weights and measures. The other two countries are Myanmar and Liberia.



Edmund Gunter's 66 foot measuring chain

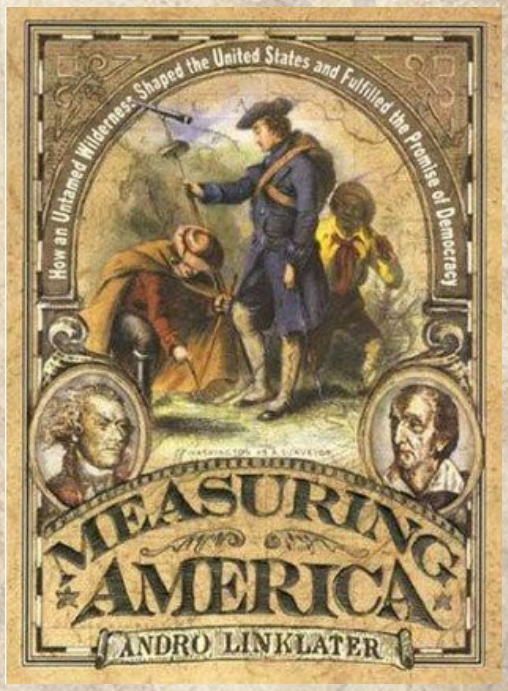


In grade school, I distinctly remember being warned that we needed to learn the metric system inside and out because the U.S would be going full metric in the next decade. Metrication or metrification is the process of introducing the metric system to replace a jurisdiction's traditional measuring units. In 1968 Congress authorized the U.S Metric Study. This three-year study by the U.S Department of Commerce analyzed the feasibility of metrification in America. The study concluded that the U.S should join the metric system as it was already used in many facets of American culture (such as science, medicine, the military, some production industries and international affairs). Congress then passed the Metric Conversion Act of 1975 to coordinate and plan its assimilation into the U.S. Unfortunately these efforts were met with some public resistance and was abandoned in 1982 under the Reagan administration. Metrification in the U.S has essentially been on a 'volunteer' basis.

With the use of Gunter's 66 foot chain, and the legal documentation of the vast majority of land in the U.S. being measured in feet, inches, miles and acres, the legality of converting and re-defining property boundaries to a standard metric system would be an ominous task! This means the U.S. Public Land Survey System is another one of the major reasons why the U.S has not jumped on board with the complete adoption of the metric system and there's no sign that it will in the near future.

So for now, while kids in grade school learn the standard U.S measurements of inches, feet, and miles, turns out they also have to learn at least the basics of the metric system for certain studies (sciences, medical field, and anything international). Hopefully teachers are no longer proclaiming the 'myth' of the U.S. going metric and instead teach the importance of learning both as essential knowledge in the modern world. ■

~ Nicki Schwend~

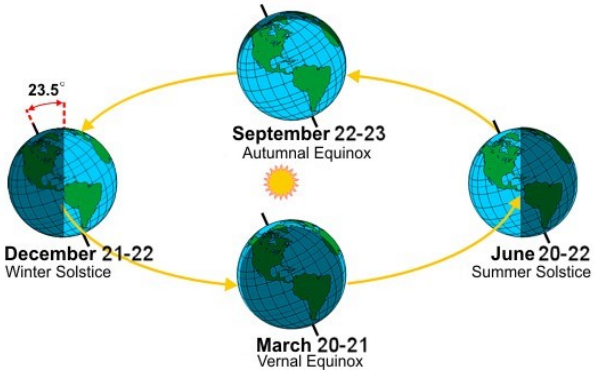


Overwintering—how plants, animals (and humans) survive the cold months, and why it matters

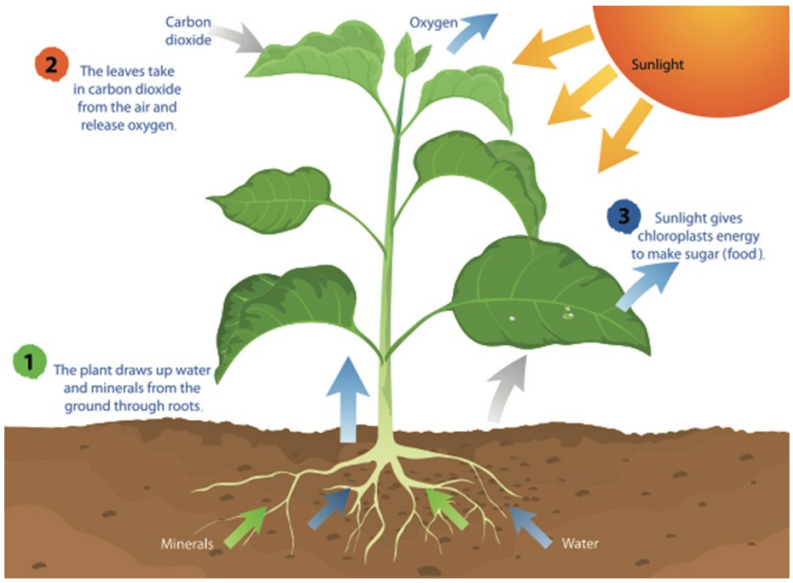
Laura Barbour, Outdoor Recreation Planner

The last few days have been warm and sunny, and I am already in "spring mode": planning camping trips, checking the garden twice a day for new daffodils poking through the leaf mulch, and pretending I don't need a jacket for a walk around the block or a quick trip to the grocery store. In reality, however, we're still deep in winter—and will be, officially, until the vernal equinox on March 20th. In Idaho, winter is not easily escapable. Even in the 'desert' of the Treasure Valley, we have cold (often freezing, snowy or inverted) weather. From November through March, puffy jackets and insulated boots are a wardrobe staple. Wood smoke drifts from chimneys, warm beverages steam in mugs, and winter outdoor recreation (ice-fishing, skiing, snowboarding, sledding, snowshoeing, and snowmobiling, and of course hot-spring-hopping, to name just a few) is a booming industry. Like many Idahoans, I grew up with the privilege of exploring and enjoying the great outdoors year-round, in the snow as well as in the sunshine (and often experiencing snowflakes and sun's rays almost simultaneously, given our flighty weather).

Inspired by outdoor adventures big and small, I took as many environmental studies and ecology courses as I could during my four years at The College of Idaho, where our field laboratory courses included visits to Succour Creek, Leslie Gulch, the Owyhee Front, the Boise River, Mores Mountain, the Morley Nelson Snake River Birds of Prey National Conservation Area, and even Celebration Park. Even though I've forgotten many of the things I used to know—scientific names for plants and animals, dates of ancient floods and volcanos, names of pioneering ecological researchers—knowing just a little bit about the landscape I grew up in added great depth to the experience of being there. Understanding the natural history of an area is like looking at an epically massive painting—perhaps blurry when you stand too close, but awe-inspiring and endlessly fascinating when you step back and watch the layers of paint, the broad sweeps of colors, interacting to create meaning. Recognizing a handful of living things (silver-hued sagebrush, glowing globe mallow, crescent-moons on nighthawk wings) and nonliving thing (sparkling granite or burnt basalt, ice breaking up on a frozen lake, or the chill of a starry winter night)—these are the tiny, immediate details that bring the picture to life. The way they interact, those living and nonliving things within the vast "painting" they compose—that is what makes up an ecosystem, and that's what ecologists study.



Ecology, the study of living and nonliving things and how they interact in a particular environment, is a relatively new field compared to many natural science disciplines (although it has deep roots in biology, geology, etc.)—the word "ecology" was not even coined until 1866, and it only developed from natural history into a more rigorous experimental science in the late 1800s and early 1900s. From then until now, the overwhelming majority of ecological research has been focused on the growing season—spring through fall (in the northern hemisphere). And this makes sense—this is the time when plants and animals are most active—more things are happening; more interactions are taking place. Also, it's colder during the winter and weather conditions can be uncomfortable or even dangerous. Many researchers, just like the rest of us, prefer not to be out and about during the cold season. So it's not surprising that ***winter ecology*** only emerged as a discipline in the mid-late 1900s.



To understand the ecology of winter, we start with a basic question: ***what is winter***? As the earth travels around the sun, it also tilts back and forth on its axis. In the winter, our northern hemisphere is tilted away from the sun, causing solar rays to strike the earth's surface at a lower angle. We have shorter days, less light, and colder temperatures due to reduced ***solar insolation*** (the amount of sunlight striking the earth's surface). The ***winter solstice*** (December 21) is the shortest day of the year and the day when winter begins, according to our calendars—although as we all know, it can begin to feel like winter in Idaho long before that date.

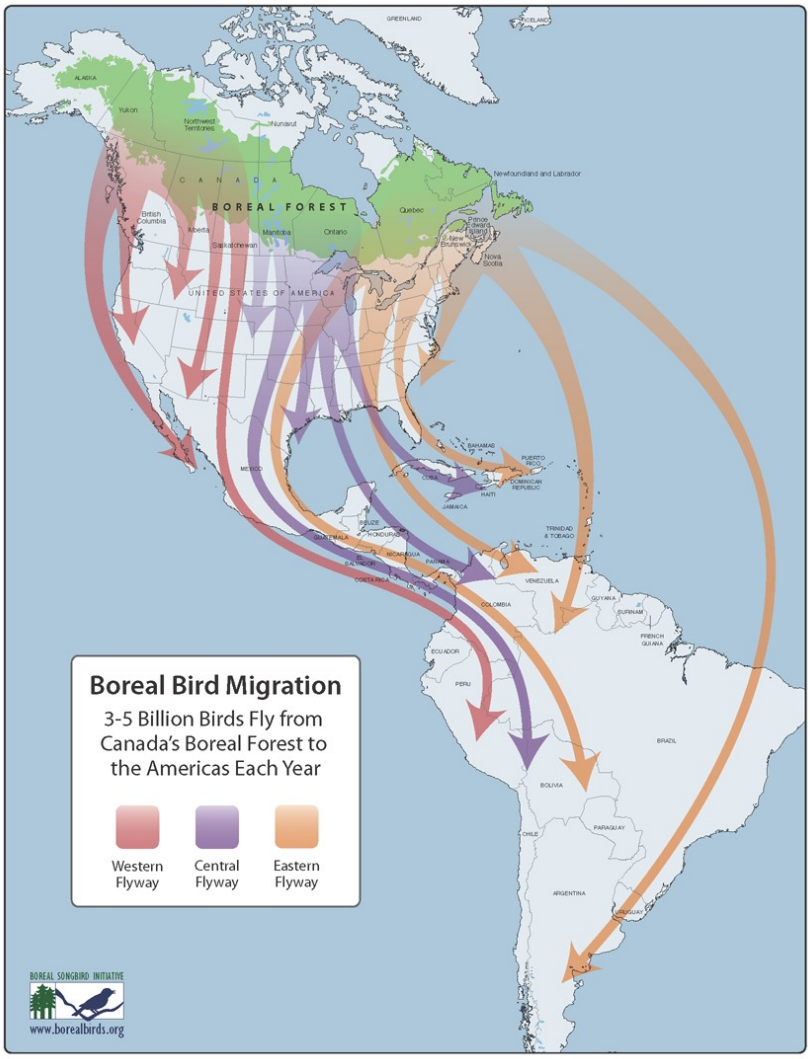
Because of the cold and the lower levels of light, winter is when plants, the base of our food webs, either die completely, or grow more slowly if at all. Plants create the energy that travels through our ecosystems through ***photosynthesis***, using the energy in sunlight to create sugars (glucose) from carbon dioxide and water, and release oxygen as a byproduct.

With the combination of short days, reduced solar insolation, cloudy skies, and sometimes even deep snow drifts, plants don't have much sunlight to work with during the winter. Additionally, water (a key ingredient in the recipe for photosynthesis) may be locked away, frozen as snow or ice in an unusable form. As plant activity slows or stops, food supplies diminish for animals as well—just at the time that bad weather and cold temperatures mean they are burning more calories in order to maintain body heat. Many animals die during the winter due to the combined effects of cold, malnutrition, starvation, disease, or predation—a concept known to ecologists as ***winterkill***. Especially in cold climates, winter has a very strong impact on the survival (or not) of plants and animals—driving adaptations in species, as well as ecosystem-level shifts.

There are three major adaptive strategies for species meeting the challenge of winter in cold climates: ***adapt*** so that they can survive while staying in place, ***migrate*** to a less extreme climate for the winter, or (like annual plants, and many insects) reproduce in the fall and then ***die***. The success of this last strategy hinges on leaving the next generation to overwinter in a protected form like a seed or and egg. They will hatch or sprout in the spring when the soil thaws, the sun shines more consistently, and resources needed for growth and energy are more abundant. Animals can also use a combination of strategies—for instance, many native Idaho bats ***migrate*** up to 600 miles in search of warmer environments in which to ***hibernate*** for the winter.

Adaptations, simply, are behaviors or traits that help living things survive in their environments. Animals that overwinter fall into two categories. ***Hibernators*** are animals that stay put, but are not active during the winter—meaning they're not out in the elements, fighting the cold and the snow and searching for scarce food constantly. During hibernation, metabolism drops so that the animal can use less energy. Some native hibernators include Paiute ground squirrels and many reptiles such as the western fence lizard. We also have some native animals that don't go fully into hibernation, but will find shelter, stockpile food stores and balance periods of activity with periods of torpor—beavers are a great example of this strategy. On the other hand, ***resistors*** are creatures that overwinter while remaining active—often, adaptations like insulation help them keep warm while foraging. Jackrabbits, lynxes and coyotes are some native sagebrush-steppe resistors.

Other animals migrate, fleeing the winter-bound regions in search of milder climates and more abundant resources. We're typically familiar with ***latitudinal migrators*** (in the northern hemisphere, those that travel from north to south in fall and return north in the spring). Monarch butterflies are an iconic example. However, other species, such as mule deer, migrate ***altitudinally***, leaving the deep snow and extreme cold in the high mountains to overwinter in lower elevation river valleys.



Thus, winter's effects on our local ecosystems are not restricted to just the direct effects of our relatively mild desert winter weather. We're also impacted indirectly, by the migratory species that descend on us from near and far—our winter residents, the mule deer from the mountains gathering in the river valleys; the rough-legged hawks from the arctic tundra hunting for rodents among our open fields. We also feel the effects of those who are just passing through, such as the thousands of sandhill cranes that make their appearance in September or October on their way south and return again, equally briefly, in the spring. All these migrators, as well as our year-round residents, must eat, drink and have shelter, so migratory arrivals and departures shape ecosystem dynamics and interactions such as predator-prey relationships. The changing seasons—fall to winter, winter to spring, spring to summer, and so on--drive the life cycles of plants and animals. The ground squirrels emerge from hibernation in the spring, foraging on the desert plants that begin to grow with the early rains—and are hunted by the prairie falcons, migratory species that return to the Snake River Plain at winter's end, to nest and lay eggs and hatch chicks—and feed them on the ground squirrels that are foraging on the flush of spring plant growth.

To pick up my painting metaphor, winter is the white space—the cold, the snow, the depletion of resources—that gives relief and form and definition to the masterpiece. Or, as Jan Tschichold, an influential early graphic designer, once said, "White space is to be regarded as an active element, not a passive background." Winter is not just a blank backdrop for spring, summer and fall, a time of nothing—it actively impacts our landscapes and ecosystems in its own right. Meaning emerges from the way that winter shapes and interacts with the other seasons of color, the way that the plants and animals in our region interact with their environment and each other, and the ways in which those patterns of interaction change from season to season.

AGENTS OF DISCOVERY

The Bureau of Land Management and Canyon County Parks, Natural & Cultural Resources Department have partnered together to bring an exciting educational opportunity to Celebration Park and the Morley Nelson Snake River Birds of Prey National Conservation Area (NCA). Explore the park in a whole new way! Join Agents of Discovery, the not-so-secret, secret agency dedicated to learning and playing outdoors. Walk the trails to unlock location-based challenges and discover more about the plants, animals and history of Celebration Park and the NCA!

What is Agents of Discovery?

Agents of Discovery is an award-winning Move to Play & Learn mobile game that can be downloaded for free and played on a mobile device at participating sites. The application allows users to discover the natural outdoor world around them in a fun and interactive way. Players unlock hidden geo-located challenges that can be solved only through observation and discovery.

Do I need an internet connection to play?

Agents of Discovery requires no WiFi or data connection while you're out exploring. You will need WiFi to download the application itself and the different missions. But you don't need to worry about cell phone data charges as you complete the mobile game!

How does the Agents of Discovery app connect kids with nature?

Studies show that outdoor classrooms and nature-based experiential activities lead to significant gains in student academic performance (American Institutes for Research, 2005). The game encourages youth to get outside and start solving mysteries related to the natural world. It is a way to use gaming technology that kids are already using to enhance outdoor experiences in a fun and educational way. The game unfolds at a variety of mission sites in parks, forests, recreation areas, and museums around the country.

Where can I play Agents of Discovery?

Currently, there is a live mission following the interpretive path to the overlook at Dedication Point in the NCA. Coming soon, there will be a live mission along the Bridge Trail at Celebration Park. Download the app for directions.

To get started:

1. Download the free **Agents of Discovery app** to your mobile device.
2. After downloading the app, look for the mission you want to play.
3. Preload the missions and head out to the park to start completing your challenges!

If you complete all the current missions, keep an eye out as new missions get added online!
AGENTS: Remember to be aware of hazards in your surroundings and practice Leave No Trace principles as you explore the trails!


JOIN AGENTS OF DISCOVERY AT THE
MORLEY NELSON SNAKE RIVER BIRDS OF PREY
NATIONAL CONSERVATION AREA
AND CELEBREATION PARK
HELLO AGENT...
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Thomas Cole (1801-1848). View from Mount Holyoke, Northampton, Massachusetts, after a Thunderstorm - The Oxbow. 1836. Oil on canvas, 51 1/2 x 76 in. (130.8 x 193 cm). Gift of Mrs. Russell Sage, 1908 (08.228). The Metropolitan Museum of Art, New York, NY, U.S.A. Photo Credit: Image copyright © The Metropolitan Museum of Art. Image source: Art Resource, NY

Interdisciplinary **Explorations**

The Idea of Nature

PUBLIC LECTURE SERIES
SPRING 2021

The Series

These lectures will be held virtually by Zoom.
REGISTRATION REQUIRED:

To register, email **ideaofnature@boisestate.edu** and a Zoom link will be emailed to you before the lecture.

The Schedule

Thursday, February 18, 2021 • 6 PM
The Hemingway Literary Center presents:
"Thomas Cole and the Destruction of American Nature"
***Alan Wallach**, Ralph H. Wark Professor of Art and Art History Emeritus, William and Mary College*

Wednesday, March 17, 2021 • 6 PM
The Department of Anthropology and the Desert Studies Institute presents
"Idaho First: How Archaeological Discoveries on the Lower Salmon River Change Our Perspectives on the Peopling of the Americas"
***Loren Davis**, Professor of Anthropology, Oregon State University*

Wednesday, April 7, 2021 • 6 PM
The College of Idaho Henberg Environmental Lectureship and the Nature Conservancy presents
"What Does the Earth Ask of Us?"
***Robin Wall Kimmerer**, SUNY Distinguished Teaching Professor of Environmental Biology and tribal member of the Citizen Potawatomi Nation*

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College of Arts and Sciences
College of Business
College of Education
Department of Anthropology
Department of Art History
Desert Studies Institute
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Graduate College
Hemingway Literary Center
School of Public Service

Idaho Archæological Society

The Nature Conservancy Idaho

THE COLLEGE of IDAHO

OSHER LIFELONG LEARNING INSTITUTE

Come Work With Us!

INTERPRETIVE SPECIALISTS

now hiring for the 2021 season

Interpretive Specialists are responsible for delivering our place-based educational programs for the public and schools in the area. This includes staffing the visitor center, giving tours, and leading groups of kids through interpretive hikes and educational activities on our k-12 field trip programs. Interpretive Specialists work part-time (up to 19 hrs per week), and are based at Canyon County's Celebration Park. Join an amazing team and come work in a beautiful place! Please email Juli McCoy (***jmccoy@canyonco.org***) for more information, or visit ***https://www.canyonco.org/elected-officials/commissioners/human-resources/*** to apply.

Interpretive Specialists are responsible for conducting tours and programs related to the cultural and natural history of Celebration Park, Lake Lowell, and other important places in Canyon County. Training will be provided on-the-job, so this position is a great way to learn more about our area, and to share this knowledge with students of all ages, as well as visitors from near and far!

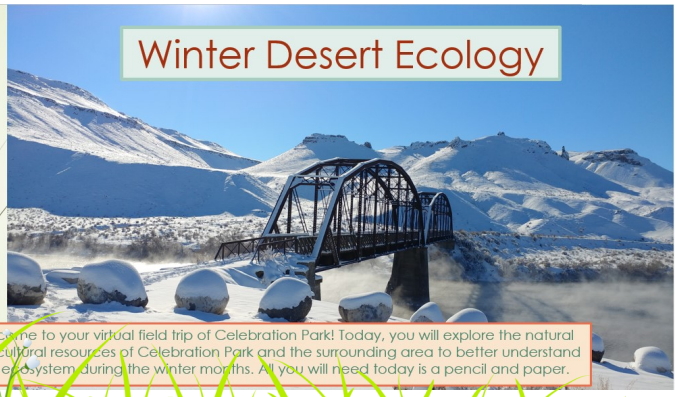
In addition to in-person tours, Interpretive Specialists will provide virtual versions of our field trip programs for schools that would otherwise be unable to attend in-person. This is a seasonal position, and runs from mid-March through October.

Spring 2021 Field Trips:

virtual options for teachers and students

The COVID-19 pandemic has challenged all of us to develop new and innovative ways to connect with family, friends and community. In that spirit, Canyon County Parks has developed a suite of virtual "field trips," alternatives to our typically on-site and in-person educational programs for Idaho k-12 students. These virtual programs are fun and engaging multimedia experiences which bring unique Canyon County places such as Celebration Park and Lake Lowell to your classroom, your home, and your computer screen! Using a combination of live presentations by trained Interpretive Specialists, videos filmed on location, and interactive activities, we have replicated as closely as possible the feel of actually being at our parks.

Our virtual program options, featured on the following pages, cover the same grade-specific educational standards as our in-person field trips. For more information, visit ***www.canyonco.org/field-trips***, or email ***parksprograms@canyonco.org***.



Virtual Stories in Stone Field Trips!

Our flagship field trip program, *Stories in Stone*, is a place-based archaeological experience designed for 4th grade students to engage with the rich cultural and natural history of southwest Idaho. Students will immerse themselves in the landscape of Idaho's first archaeological park—Celebration Park.

Our virtual presentation of this field trip will immerse students in our typical programs. It will include a "hike" to explore the park's unique petroglyph collection, a Native American Lifeways presentation, a hunting lesson on the atlatl range, and a dive into Idaho's mining history during a scenic walk to the historic Guffey Railroad Bridge.

This 45 min or 1 hour field trip will be a combination of footage from our scenic park and interactive activities lead by our Interpretive Staff. This can be conducted with students on their devices at home or in your classroom. Students will get a taste of the wonder of our park and hopefully visit us in person soon! Please email **parksprograms@canyonco.org** to schedule!

Virtual Wildland Fire Ecology

We'll be offering our Wildland Fire Ecology Field Trip as a virtual education option in spring 2021, from March 15 through the end of the school year! This virtual format will bring our Wildland Fire Ecology field trip experience from Celebration Park to your classroom.

Our virtual Wildland Fire Ecology field trip is geared towards 5th-8th grades. Through a mix of videos of our park and interactive activities, students will learn about the science of wildfire, how it impacts the landscape of Southwest Idaho, and how brave firefighters manage and fight these fires. Through a virtual ecology hike, students will "visit" plants that interact with fire in this ecosystem. A fire science lesson will teach students how fire is fueled, spreads, and behaves. In a segment about fire tools, students will gain insight on the dangers of fire fighting and exactly what it takes for fire fighters to keep us safe!

This program will run 45 minutes or 1 hour and can be conducted with kids on their laptops in class or at home! Please email parksprograms@canyonco.org for more info or to schedule!

Virtual Lake Lowell Field Trip

In May and June, we will be offering a modified virtual version of our Lake Lowell field trip, geared towards 2nd and 3rd graders. This program teaches students about Lake Lowell as a habitat. They will learn about the birds, fish, and other creatures that live here, and how they are impacted by the water quality of the lake.

This field trip will be a short virtual program, no more than 30 minutes total. It will consist of a mix of interactive activities and videos that are designed to keep younger elementary-schoolers engaged and having fun! The program can be run from the classroom or when kids are learning at home. Email **parksprograms@canyonco.org** for more information.

Summer Programs: Archaeology Adventures at Celebration Park

SUMMER FUN AT
CELEBRATION PARK

(offered June through August)

Archaeology Adventures

- K-2nd grade

Stories in Stone, Summer Edition

- Grades 3+

Students will explore the petroglyphs, learn how Native Americans drilled holes using pump drills, and get to make and take home their own artwork during an investigation of Native American ceramics! Younger students play a traditional Native American hoop-and-dart game while older students will try their hand on the atlatl range!

This program typically starts at 10 AM, and can be adapted to run between 2 and 4 hours.

Field trips are offered by reservation only! To view available dates and to book a summer program for your group, please use our online booking calendar at www.canyonco.org/field-trips

Contact **parksprograms@canyonco.org** for more information, or call **208.455.6022**

Canoe Science Camp

Join us for a learning-focused STEM summer camp for 10-12 year olds interested in exploring the outdoors through science and recreation! Student participants collect water quality data using scientific instruments and engage in hands-on field science, experimental design, and hypothesis testing to learn about ecology and hydrology. They also develop recreational paddling and hiking skills through practice each day. Trained adult guides in each canoe will ensure safety and provide a fun and supportive learning environment.

Canoe Science Camp Details:

- Ages 10-12
- Session I: June 14-18
- Session II: June 21-25
- Session III: June 28– July 2
- Session IV: July 12-16
- Monday-Friday, 9am-2pm
- Lake Lowell Park, 12996 Iowa Avenue, Nampa ID 83686
- $50/session

The 2021 season of Canoe Science Camps is made possible thanks to grant support from the:

IDAHO STEM ACTION CENTER

COVID-19 precautions including but not limited to social distancing and mask wearing will be required for all camp staff and participants. *More information on program logistics and registration coming in spring 2021!*

CANYON COUNTY
Parks, Cultural & Natural Resources

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