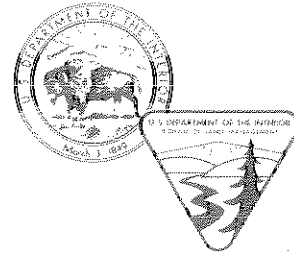


Our Public Lands

Fall 1965

Wildlife's Happy Habitat
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5960



DEPARTMENT OF THE INTERIOR
Stewart L. Udall, Secretary
BUREAU OF LAND MANAGEMENT
Charles H. Stoddard, Director

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Cover photo by Doyle Kline

Created in 1849, the Department of the Interior—a Department of Conservation—is concerned with the management, conservation, and development of the Nation's water, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.

Issued quarterly by
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Washington, D.C. 20240

The printing of this publication has been approved by the Director of the Bureau of the Budget, February 14, 1963.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price 20 cents (single copy). Subscription price 60 cents a year, 25 cents additional for foreign mailing.

OUR PUBLIC LANDS is the official publication of the Bureau of Land Management, U.S. Department of the Interior. Issued four times yearly in January, April, July, and October.

Dan Saults, Information Officer and Assistant to the Director.
Ed. Kerr, Editor.

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News Highlights

Utah Job Corps Center Opens

BLM's second Job Corps Conservation Center opened on July 29 at Castle Valley, Utah, near the city of Price. This is Utah's first center. Fifty Corpsmen were slated to enter training the first day of operation, with 100 to be enrolled prior to the Center's dedication on August 14. Secretary of the Interior Stewart L. Udall awarded BLM's Price District Office a unit citation for its excellence of service in establishment of the Castle Valley Center.

Dozen New Campsites Announced

Twelve new campsites have been opened by BLM on public lands in Western States this year. The Bureau now operates 122 campgrounds, including the following types:

Hunter style—only minimal facilities, usually located in remote regions.

Family units—more extensive facilities, including fireplaces, tables, sanitation, and running water.

Picnic sites—containing tables, fireplaces, and sometimes water, but no overnight facilities.

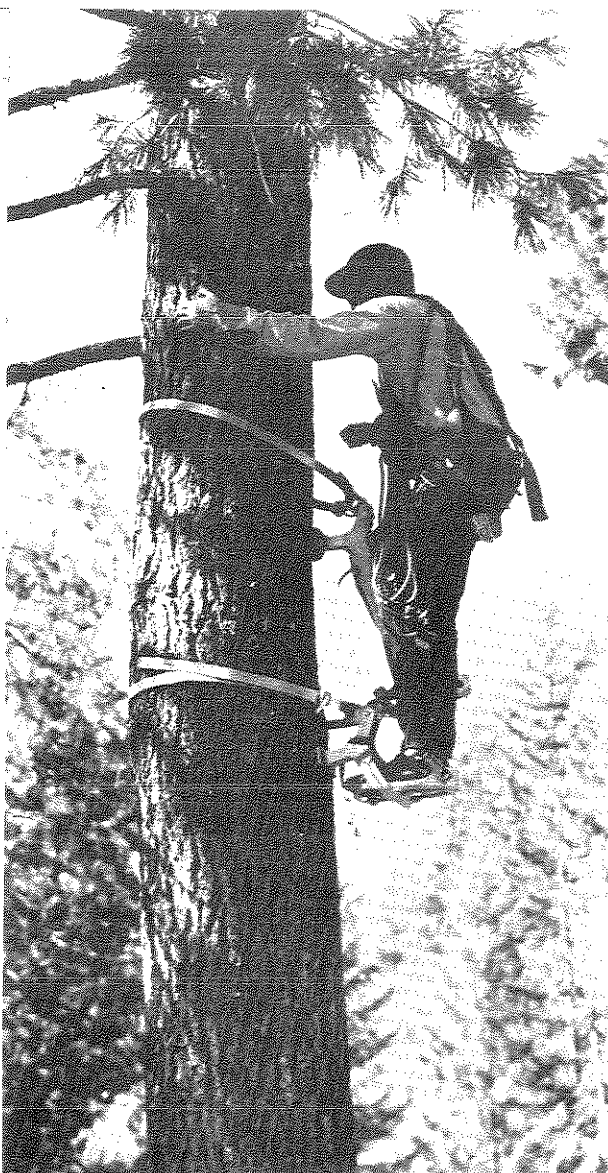
Two of the new units are in Owens Valley, Calif., where 115 family units are being prepared. Other locations include Kingman, Ariz.; Alamogordo, N. Mex.; Gypsum, Colo.; Canon City, Colo.; Ennis, Mont.; Elko, Nev.; Moab, Utah; Custer County, Idaho; Big Horn County, Wyo.; and Harney County, Oreg.

Revenues Hit 3-to-1 Mark

Gross receipts of BLM for fiscal year 1964 were more than three times the amount expended by the Bureau during that period. Revenue from the public domain resources amounted to more than \$199 million, while funds spent by BLM totaled less than \$63 million. Most receipts came from mineral leases and permits, and sales of timber.

Bureau Extends Helping Hand Overseas

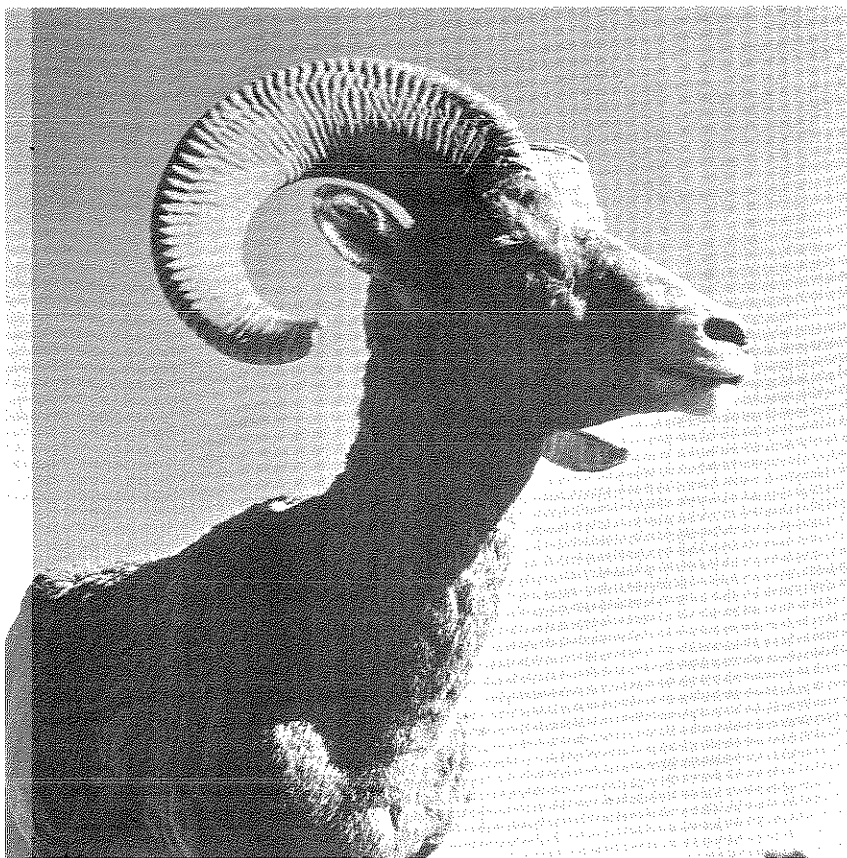
Seven BLM specialists have been assigned to work on resource management programs in Brazil and Nigeria. The Brazil project mainly involves public land distribution and resource use problems. Nigeria needs help in stabilizing her livestock industry.



Timber sales by BLM hit an alltime high during 1964, accounting for an important part of the revenue from public domain lands. And the "high climber"—shown here prior to topping a spar tree—is still an important man in Oregon logging operations.

BLM-SCS Agreement Sealed

The Bureau has signed an agreement with the Department of Agriculture's Soil Conservation Service for coordinated planning and work in Western areas where public and private lands are intermingled. The two agencies will combine their methods and techniques, and will work more closely with soil conservation districts where there are "checkerboarded" or other mixed patterns of public-private landownership. Also affected will be areas where public and private lands are dependent upon one another, as in upper and lower portions of the same watershed.



The desert bighorn sheep of Nevada. (Photo by Jim Lee.)

Wondering where the deer
and the antelope play?
This is the place!

Wildlife's Happy Habitat

By Bob Smith,
Chief of Wildlife Staff, Washington, D.C.

THREE million big game animals can't be wrong. That's how many choose the public domain for their forage needs every year, particularly during the winter months. And these numbers should increase as the Bureau of Land Management steps up its management program for wildlife habitat—one of the mandates of the Classification and Multiple Use Act of 1964.

BLM plans not only to provide more forage for wildlife but to make hunting lands more available to the sportsman public. Posting programs are now underway and new access roads are on the planning board. Special maps have been prepared in most states to help sportsmen find public domain lands and distinguish them from private lands. Meanwhile, BLM is conducting research programs in cooperation with other

agencies to "zero in" better guidelines for habitat management.

Situated in 11 Western States and Alaska, the 460-million-acre public domain is alive with game, birds and fish of almost every description: The antelope of Wyoming, where the harvest was 35,000 in a recent year—javelina in Arizona—desert bighorn sheep of Nevada—wild turkey in New Mexico—the elk of Wyoming, Colorado, New Mexico, and Montana—and deer are everywhere.

Here's a peepsight look at just a few of the offerings, subject to state hunting and fishing regulations:

Alaska.—The Gulkana Basin is home of the famous Nelchina caribou herd, as well as moose and Dall sheep. Also brown, grizzly, and black bears, ptarmigan and spruce grouse.

Arizona.—Deer, javelina and bighorn sheep are most important big-game species in the State—deer north of the Grand Canyon in Arizona Strip, javelina near Globe

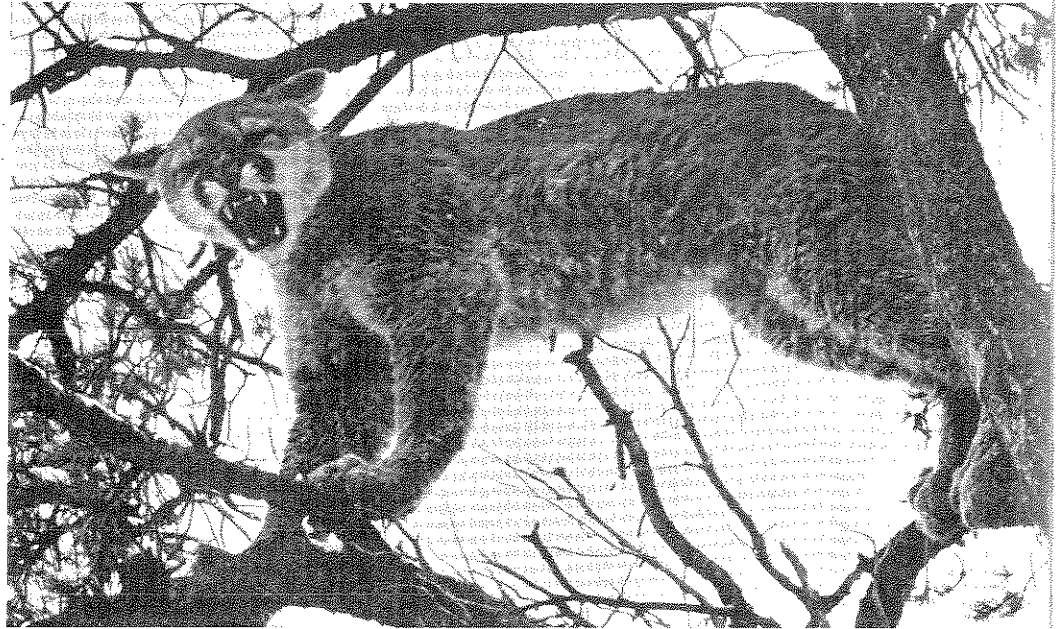
and Tucson. Small game statewide. Limited elk and antelope. Nonresident hunters encouraged.

California.—Good deer hunting areas include Kennedy Meadows in southeast Tulare County and area northwest of Coalinga. Deer and quail south of Fall River Mills and west of Corning and Paskenta. Antelope near Susanville and east of Cedarville. Steelhead and salmon fishing on Middlefork Eel River and Trinity River.

Colorado.—West of Craig and Meeker for deer. Elk

chukar hunting in northern part of State. Quail are found in the south or in the valleys, pheasants in larger irrigated valleys in western Nevada. Trout fishing excellent in Topaz and Walker Lakes. Warm-water fishing is good in Ruby Lake marshes, and Lake Mead.

New Mexico.—State interested in more hunting pressure on deer and elk. White-tail and mule deer found near Raton and Silver City. Elk hunting near Taos, Questa, and Raton. Wild turkey populations best near Los Alamos and Santa Fe and javelina near



The Mountain lion of Colorado. (Photo by Colorado Fish & Game Commission.)

hunting southwest of Gunnison, where 80 percent of area is public land. Sage grouse found west of Craig. Best blue grouse area is southwest of Gunnison. Trout fishing excellent on Arkansas River between Canon City and Salida. Good chukar hunting in Escalante Canyon west of Delta.

Idaho.—Chukar hunting supreme in foothill public lands. Mule deer hunting good in desert rimrock country in southwest corner of State. State is tops in elk harvest and rated high for mountain sheep, mountain goats, bears, and moose.

Montana.—Antelope roam Carter, Powder River, Custer, Golden Valley, Garfield, and Rosebud Counties. Elk in southwestern section of State. Fish for trout in Musselshell River or Madison River.

Nevada.—Try the Toiyabe Range near Austin or the Desert Range and Muddy Mountains near Las Vegas for desert bighorn sheep. Mule deer hunting best in Elk County. Sage grouse, blue grouse, and

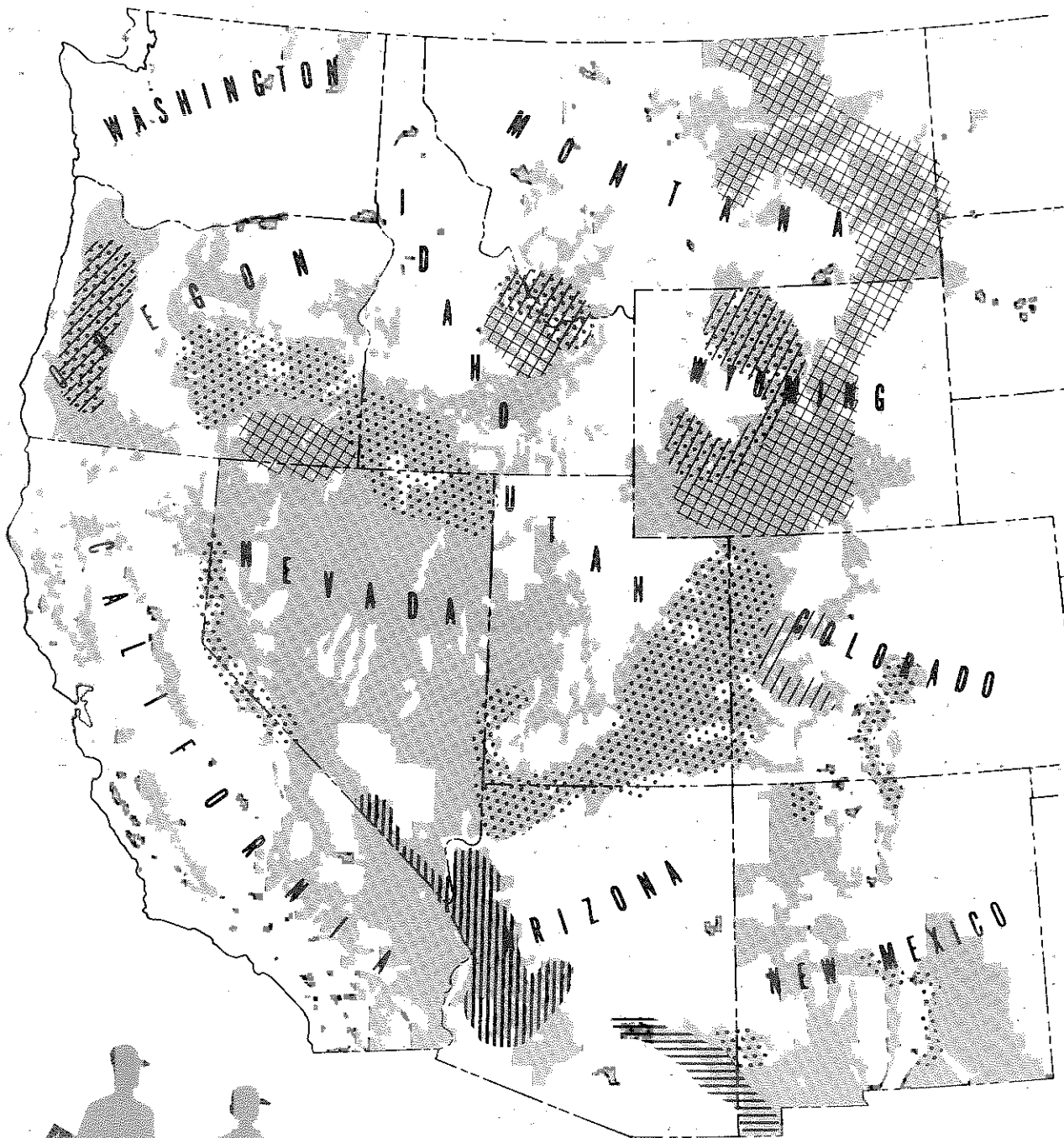
Lordsburg and Animas. Other game: Barbary sheep, bears, mountain lions, quail, pheasants, and waterfowl.

Oregon.—Black-tailed deer can be found on public lands throughout the State. Cascade Mountains best for mule deer and chukar hunting. Good warm-water fishing in Owyhee Reservoir near Nyssa. Try Beulah, Malheur, and Bully Creek reservoirs for trout.

Utah.—In the mountainous areas, 120,000 mule deer are harvested during the year. Pheasant shooting near Logan, Fillmore, and Duchesne. Hungarian partridge, sage grouse, and California quail found in northern section, mourning dove statewide. Brown trout like the Blacksmith Fork River, but rainbows are found at Flaming Gorge.

Wyoming.—More nonresident antelope licenses are issued here than by any other State. Deer and elk hunting also very good, as well as moose. Other game: Rocky Mountain bighorn sheep, bears, pheasant, Hungarian partridge, chukar, and bobwhite quail.

Big Game on the Public Lands

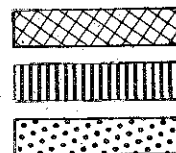


PUBLIC LANDS MANAGED BY BLM



ELK

JAVELINA



ANTELOPE

BIG HORN SHEEP

DEER

The Christmas Tree Rush

It often costs more but it means so much more for some families to cut their own tree

**By Dennis E. Hess,
District Manager, Las Vegas, Nevada**

Although nominal fees probably will be charged throughout BLM, more than 100,000 families are expected to cut their own Christmas trees from the Western public domain this year. Counting gas and permit fees, the do-it-yourself tree will cost much more than the store-bought variety but family treks to the woodlands increase with each yuletide season.

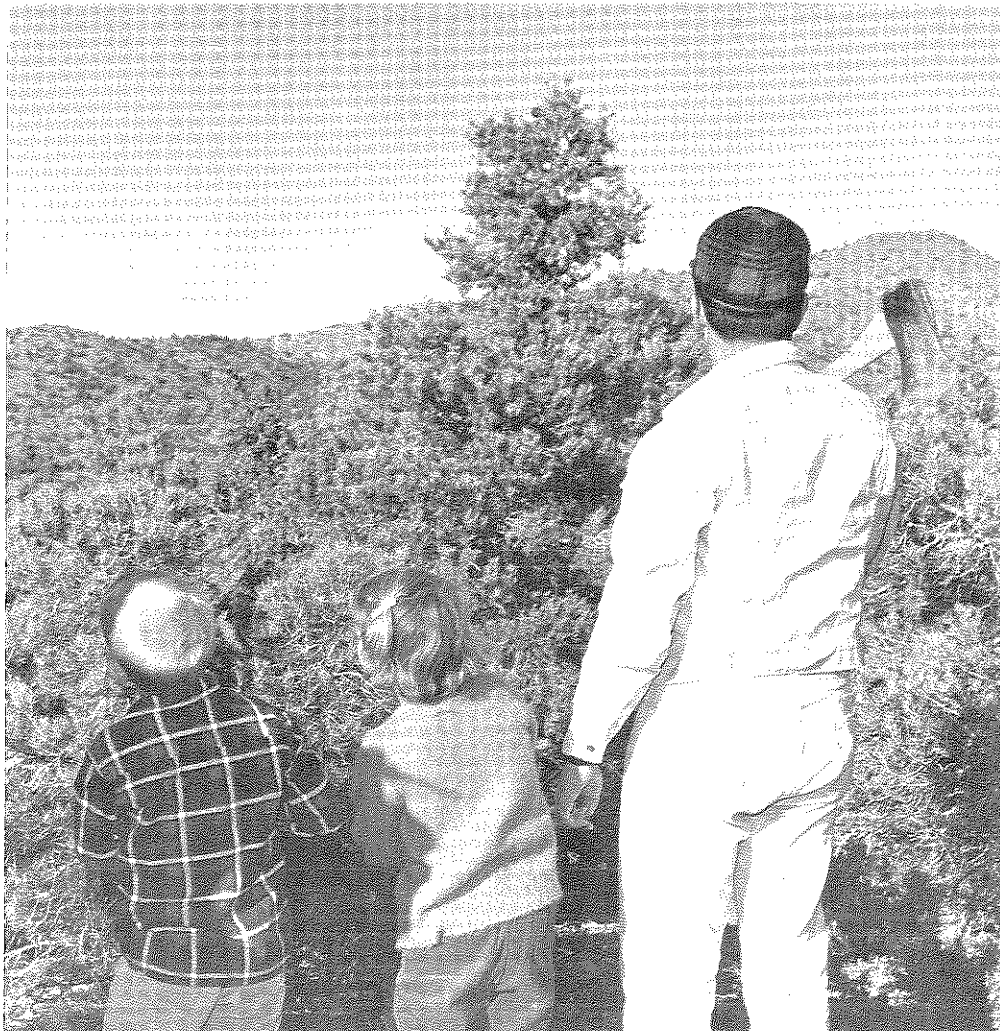
In the Las Vegas, Nev., district alone, more than 1,500 families took to the hills last winter with axe, map, metal tag, and permit in hand. The nearest cutting area was 175 miles (cutting is not permitted on nearer public lands because the scarcer trees are more valuable for aesthetics and watershed protection).

District permits specified that only the plentiful

pinyon pine and juniper could be felled in height over 2½ feet and at least 300 feet from the road. Also, there was no limit on gathering pine cones or a bushy plant known as a "bird cage," which when painted makes an interesting Christmas decoration. Approximately 2,000 permits were issued by the office during a 3-week period. In addition 800 trees were sold to Boy Scout troops, church groups, and other cutters for commercial purposes.

The Jim Deitch family of Las Vegas, shown here, selected the Caliente area for their adventure. After a picnic along Meadow Valley Wash the family proceeded over Oak Springs Summit, where they chopped a 7-foot pinyon pine. The children bubbled over as they selected their own tree and watched their father fell it and tie it on their car. A short time later it was being decorated in their living room.

The Jim Deitch family of Las Vegas, Nevada, was one of 1,500 who took to the hills last Christmas for their tree. (Photo by Las Vegas News Bureau.)



These two New Mexico farmers agree:

"There is no such thing as free land."

The High Cost of Desert Farming

By Doyle Kline,
*Resource Utilization Specialist,
Santa Fe, New Mexico*

"Desert homesteading works if you are long on money or short on sense."

That's what a successful desert farmer says, and another desert homesteader agrees. Both have producing farms in New Mexico. And both have tips for those who would dream of having the same.

Why such a statement? The first half of the answer is water. It lies deep underground in most places, if it can be found at all. It is very costly to sink a well 400 to 600 feet deep and pump enough water to the surface to wet the soil and keep it moist. Above ground, expensive reservoirs, ditches, and land leveling are needed to conserve the water, and to deliver it to thirsting crops.

The second half of the answer is that just any crop won't do. To succeed, you have to know how to choose money-making crops and then how to make your methods—and the crops—pay off. (It also should be noted that lands must be classified by the Bureau as suitable for entry and most lands do not qualify!)

This is a big job anywhere. In the desert it is bigger still.

After spending \$35,000 and all his energy on a 160-acre desert homestead near Deming, Olin Offutt says: "Only two kinds of people can prove up on a desert homestead—those who have plenty of money, or those who don't have sense enough to know it can't be done."

Mariano J. Varela put \$116,000 into his 480-acre farm southwest of Las Cruces. "You can make it," he says, "if you have money, plenty of money."

Hard Battles

How did these families succeed? There were times when it must have seemed for each of them that they would lose to the sand, the wind, and the searing sun. Offutt was experienced at farming, Varela was not. Each tells his own story—

"Six years ago I was working for wages in Deming," Offutt recalls. "I owned 160 acres on the outskirts of town. We had lived on that land 20 years but were

short of water and could farm only 20 acres of it. Actually my wife Ruth farmed it.

"I always wanted to be a farmer. To me it meant independence. My chance came when a man I knew got sick. He couldn't handle 160 acres he had homesteaded near Red Hill, about 12 miles southwest of here. So he hired me to run the place. Then the man died and his wife gave up the homestead. I saw a chance to make my dream come true and I filed an application with the Bureau of Land Management for a 'desert land entry' on the place. They gave me the go-ahead on September 1, 1960."

Offutt had little cash, but he had a willing and capable family. They all went to work. To get money to pay part of the cost of irrigation wells on the Red Hill place, the family sold 5 acres of their 20-year-old farmstead near Deming. They already owned most machinery needed to clear, level, and ditch the desert land entry. Without such machines, Offutt would have had to contract the work—calling for still more cash he did not have.

"About this time," he relates, "I rented a small place southeast of Deming and put my son Ted to work on it. My wife Ruth continued to farm the home place. I helped out all around, but the Red Hill farm was my biggest job."

Had To Go Slow

"For 5 years everything we made on the two other places went into developing the desert land entry. That forced us to go slow. We couldn't borrow money on the homestead because we didn't have a patent (title). We could borrow on the home place and we did that only when absolutely necessary."

The Offutts got a break when they were permitted to take natural gas from a pipeline crossing the south end of the homestead. With the gas they fueled engines to drive the irrigation pumps. Otherwise they would have had to depend on electricity. Under the circumstances, that would have been more expensive.

"Even with all the costs and the hard work, I wish now we had filed on 320 acres," Offutt says. "In these times 160 acres—with good luck—is the barest economic minimum for a family farm. To make the home-



Above: Offutt checks two-week-old Egyptian-type cotton.

Right: Donna Jean Arrington, age 3, finds that water for alfalfa also is for wading on the desert homestead of her grandfather, Olin Offutt of Deming, New Mexico.

Lower right: Feeding hogs is profitable on Varela farm.

stead pay, I had to raise cotton. To get a cotton allotment, I had to buy a farm that had an allotment.

"About 2 years ago I bought a rundown place between Deming and Columbus. It had a 44-acre cotton allotment. I transferred it to the desert land entry. Last year, I grew cotton, milo, higera, pinto beans, and tomatoes. A blight hit my tomatoes. But I had cotton I could be proud of—three bales to the acre. In 1963 I made three bales to the acre and in 1964 I made 2.88 bales. That's about double the State average."

"We'd do it again," Offutt says. "In fact, I'd like to get another 160 acres so I could make more money. But I've learned one thing—there's no such thing as free land."

The Varela Farm

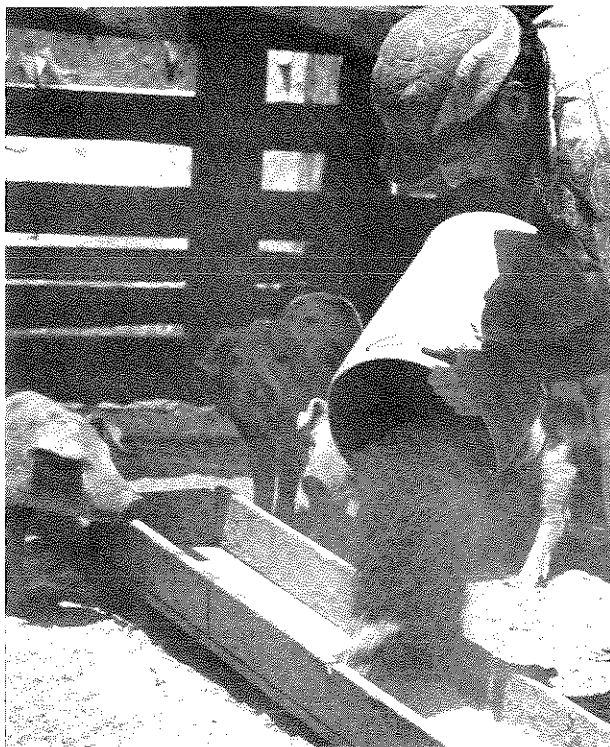
Mariano Varela's desert farm lies in a shallow depression 12 miles north of Mexico and 25 tortuous miles west of the nearest settlement. To the west the Potrillo Mountains thrust 3,000 rocky feet above the plain. In the heat of the day, whirlwinds loft tawny "dust devils" that writhe across the flat and into the mesquite. Near-

by lies a volcanic crater, Kilbourne Hole, "a mile wide and half a mile deep," and a dwelling place for lizards, rattlesnakes and scorpions.

To this spot the Varelas brought their money, their hope, and their dreams.

"It all began in 1959," Varela recounts. "We were living then in Ruidoso, N. Mex., a mountain resort. We had a profitable feed store in El Paso, Tex. And we had a friend, Ruben Alvarez, Sr., who had filed for a desert homestead in the valley at the foot of the East Potrillo Mountains. I began farming in the desert because Mr. Alvarez talked me into taking over his homestead.

"We decided we'd live on our land. We started out to build a three-bedroom house with kitchen and dining room. We wound up with four bedrooms, two baths, a living room, a big kitchen-dining room, and attached (but unfinished) garage. I'm afraid to finish



the garage. Every time I try, my wife says she needs another room. That's the third garage I've started."

A big factor in the Varela's decision to move to the desert was to give their children a taste of country living. For 3 years, the children spent their free time riding horseback, swimming in the irrigation reservoir, picnicking at Kilbourne Hole, wrangling cows, and "driving the school bus." In all, 11 children had to be transported daily between the homestead and the Gadsden Consolidated School near Anthony, N. Mex.



Ruth Offutt "pumps" the aluminum siphon with her hand to start water into furrows planted to cotton.

The passengers included the three school-age Varela children and eight children of men hired to work on the homestead. It was a tooth-rattling 50-mile round trip, mostly over "washboard" clay and sand.

"We have put a lot more money into the homestead than we have gotten out of it in the past 5 years," Varela says. "We couldn't make it on what we could raise. We've depended on livestock and egg production. I'm an egg distributor in El Paso along with my feed business."

Varela saw in the homestead a chance to increase the revenue from his feed mill by converting feed into eggs. He bought 42,000 laying hens and housed them at the farm in six large chicken houses. Each day, he fed them 8,000 pounds of laying mash. When he marketed the eggs, he realized \$80 per day in profit on his feed, which was more than if he had sold the feed alone.

"We put in a good-sized permanent pasture and irrigated it from our wells and our reservoir," he said. "We bought 500 calves from local dairies and fattened them on our feed, and on the pastures, and they made us a profit. But hogs are the moneymakers. We sold \$12,000 worth of pork last year and we have 200 hogs



Dora Varela and son, Fernando, on New Mexico desert homestead.

on the place now, and also a few cows and calves."

Varela plans to increase his production by raising alfalfa and feed and to expand his egg and meat production because it fits well with his El Paso feed business.

"I figure we have spent \$100 per acre just to get our land ready. We put in three wells that cost \$10,000 apiece. We had to clear and level the land, and build ditches. We've got at least \$116,000 in the place."

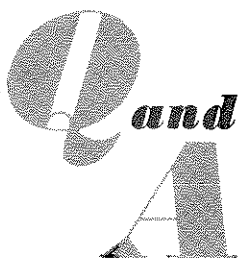
Varela says an operation like this would be better off on 160 acres. "The money I've spent would have gone farther. I could have developed a smaller acreage more the way I wanted to."

"We didn't have too many hardships," he says. "Mrs. Varela finally got used to shooting rattlesnakes and swatting black widow spiders and scorpions. One winter night a gas heater in a brooder house exploded. We all turned firemen and fought the blaze and kept it from the chicken houses. But we lost 25 calves and pigs."

Early this year the family moved into El Paso "to get a taste of city living," but plans to return to the farm before the year is out. Meantime their daughter Dora and the "hired man" look after the homestead.

And so it goes—one farmer wants more land, the other wants less.

Yet both agree it pays to have outside help if you're going to farm the desert.



What Is Oil Shale?

Questions are based on those most frequently asked in letters received by the Bureau of Land Management.

Is it true that oil shale is one of this country's greatest undeveloped resources?

True. Rich deposits in the Green River Basin contain an estimated 600 billion barrels of oil—about twice the amount of known recoverable petroleum reserves in the world.

Why is it still undeveloped?

Mainly because our supplies of petroleum have been plentiful and easier to utilize.

What is it?

Technically it's not shale and does not yield "oil" as commonly known. It is a marlstone which contains kerogen (also known as bitumen), an organic deposit from which "oil" is obtained through distillation. It can be refined to form such products as kerosene, gasoline, diesel, and jet fuel. The deposits are mostly remains of small plants which decomposed through millions of years.

What does it look like?

Oil shale is a fine-grained sediment ranging in color from tan or gray-white through brown or blue to nearly black. Organic deposits appear throughout the stone in horizontal bands or layers, with richer deposits composing darker layers.

Where is it found?

The largest deposits in the United States are in the Green River formation, covering about 16,500 square miles in Colorado, Wyoming, and Utah. Most of the shale is on public lands administered by the Bureau of Land Management. In other words, the public owns more than 80 percent of the shale oil contained in all deposits, with about one-fourth privately owned.

How is it extracted?

Present processes involve heating mined and crushed shale, converting the organic deposits to oil, gas and "carbonaceous residue." The major problem is how best to extract it economically, and without destroying the land surface or creating pollution and other problems.

How about production costs?

Present estimates indicate that the cost difference between producing oil from petroleum and oil may not be great. However, there has not been any commercial production of shale oil in the United States, so reliable cost figures are not available. Shale oil may be competitive with petroleum but this has not been demonstrated.

Can a claim be staked on oil shale acreage?

No, lands owned by the Federal Government are no longer available for mining location and have been withdrawn from leasing since 1930. However, about 350,000 acres of land in the Colorado-Wyoming-Utah oil shale area are privately owned. These, of course, can be developed by anyone who owns them or can obtain rights to them.

Haven't certain claims been staked already?

About 150,000 unpatented oil shale placer mining claims were staked before enactment of the Mineral Leasing Act of 1920. If these claims are held valid, the land involved will become private. If they are held to be invalid, the land will remain in "withdrawn status" and be reserved for investigation, examination and classification for proper development of this resource. Further legislation may be necessary.

The Pony Express R

By Terral F. King, *Range Conservationist, Murray, Utah*

You can still travel the Pony Express trail in Utah—so strike out in a cloud of dust and head for Lookout Pass. Station sites are well marked.

IT'S almost like stepping into the past to travel the old Pony Express route in western Utah as it crosses the desert, climbs the mountains, and wends its way through the renegade Indian country of the past. During its brief life (about 19 months), the Pony Express carried such important news to the people in California as Lincoln's Inauguration and the attack on Fort Sumter. The Pony Express gave Utahans the news from the East in 6 days, where it formerly took 3 months.

The entire route extended from St. Joseph, Mo., to Sacramento, Calif. Beginning on April 3, 1860, the service was stopped on October 24, 1861.

One marvels at the fortitude that kept men tending the stations. For survival they had to depend upon water hauled great distances and their only company

was an occasional traveler and the pony rides. They had to be constantly on the alert for hostile Indians.

Through the years, both the elements and vandalism have taken their toll, but there is still much to be seen along the dirt and gravel road adjacent to the old trail. So pack a lunch and plenty of drinking water and let's take a tour.

Begin at Fairfield

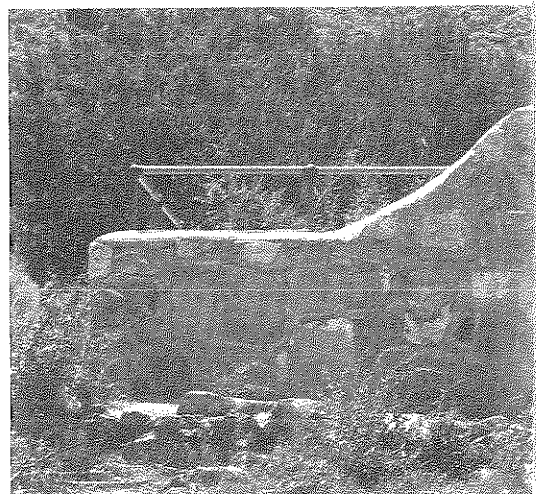
The site at Fairfield, approximately 18 miles southwest of Lehi on Utah Highway 73, is now a State park, but once was Fort Crittenden. There is a museum here now and the State has restored one of the old buildings. Just prior to the Civil War, this was the third largest city in Utah and the town became a main stop for the stage and Pony Express.

From Camp Floyd, drive west to the top of Five-Mile Pass, where you leave the highway and continue on across Rush Valley. Pony Express stations were situated 8 to 15 miles apart, depending largely upon the topography over which the horses had to run. First stop is the East Rush Valley Station. A monument stands here and at most of the stations across the desert, complete with metal plaque furnished by the Daughters of the Utah Pioneers.

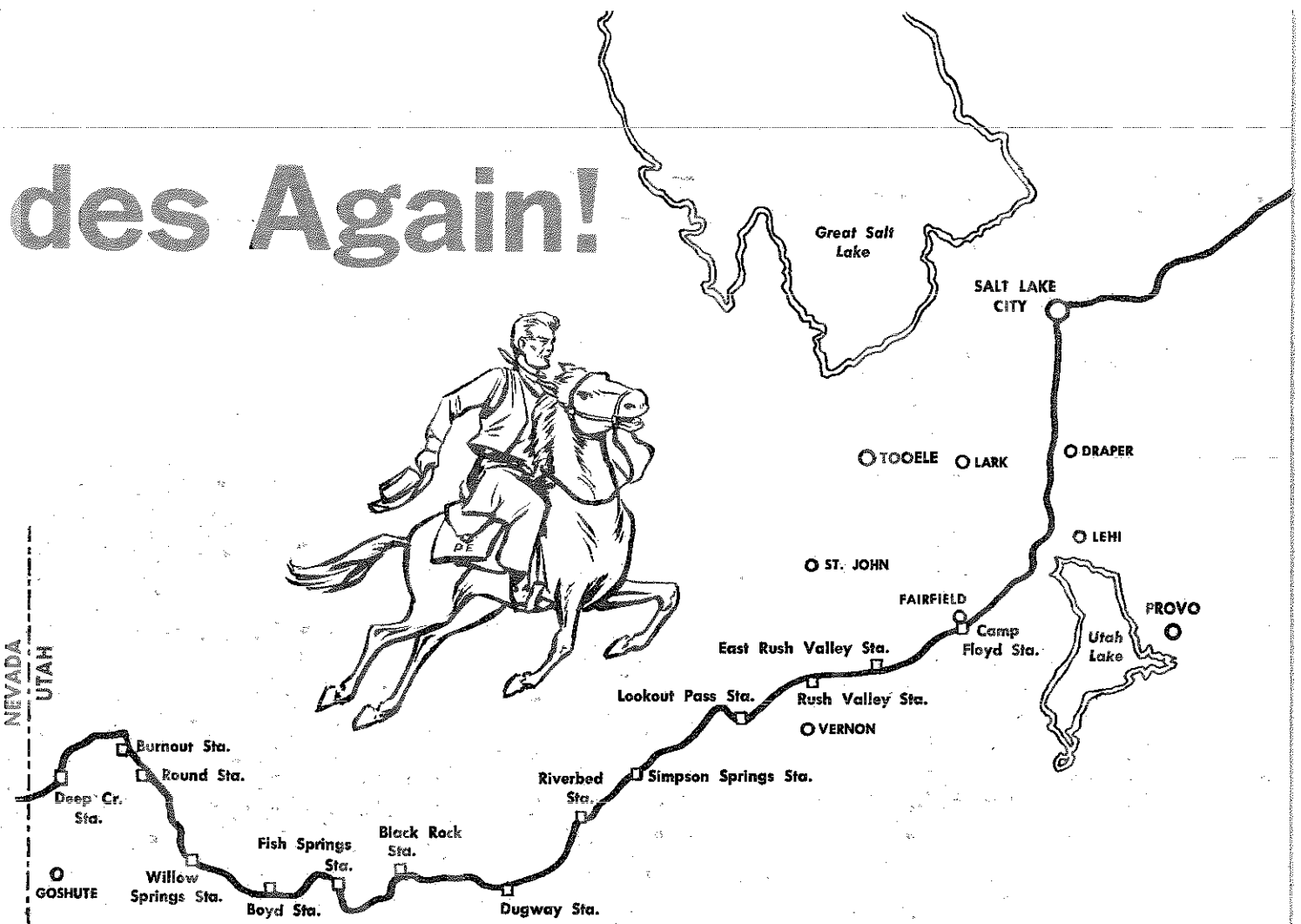


Left: Gun portals can still be seen in ruins of Boyd Station, near Callao, Utah.

Below: Dog cemetery at Lookout Pass is interesting attraction for riders of the Pony Express trail.



des Again!



Next is the Rush Valley Station where the colorful H. J. (Doc) Faust operated a horse ranch that supplied horses both to the Pony Express and the Army. Faust also carried the mail on several occasions. While living in Rush Valley, "Doc" Faust and his wife had a narrow escape from death at the hands of the local Indians. It seems that Mrs. Faust had taken a liking to a couple of the Indian women and had given them several pies. Not being used to rich pastry, the women became sick. The chief of the tribe and several warriors came to the station to inform the Fausts that they were to die for poisoning the women, but they wanted

the Fausts to feed them first. It was only the timely arrival of a friendly chief that saved their lives.

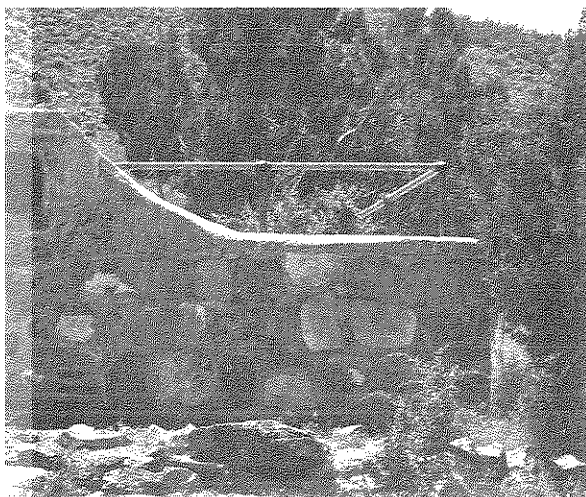
Lookout Station

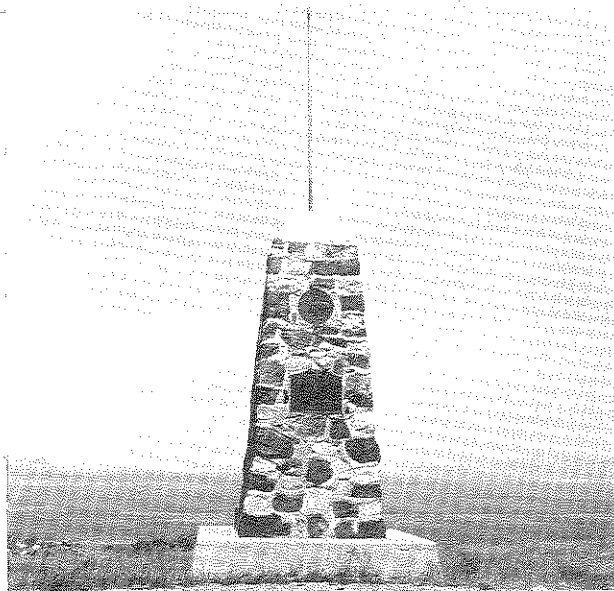
Driving southwesterly up through Lookout Pass to Lookout Station, you'll find a monument and a small rock cemetery. Horace Rockwell and his wife, Libby, operated the station here. In the small rock cemetery, they buried three travelers—and four dogs that they prized very highly.

The names of the people are unknown, but the names of the dogs are there. It is told by the people in the area that Mr. Rockwell, one cold winter night, forced a doctor at gunpoint to come out and doctor one of his dogs during a blizzard.

Next stop is well-known Simpson Springs on the west side of Simpson Mountain. Here remnants of the old stone station house still stand. Simpson Springs was one of the main stations because water was hauled from here to all the stations on west to Fish Springs.

West of Simpson Springs across Dugway Valley are the true desert badlands which once were overrun by renegade Indians. From here into eastern Nevada,





Monument at Simpson Springs pony express station overlooks a sweeping view of Dugway Valley.

the Pony Express had more trouble with the Indians—led by Tintic, Winnemucca, and Pocatello—than any other place on the entire route. When an Indian outbreak came in 1861, two pony riders were selected to carry the news from Ruby Valley, Nev., to Salt Lake City. They found that almost every one of the desert stations had been attacked by the Indians. Several riders and station keepers had been killed and most of the stock had been run off. The two riders narrowly escaped death at one point when they were ambushed. They traveled the 300 miles in 34 hours, using 14 horses and 2 mules.

Riverbed Station is located at the foot of Table Mountain, in the bottom of the old Sevier riverbed. Coming up on the old river bank, the road deviates a little from the old trail because the horsemen traveled on the higher ground more to the south.

Dugway Station

Just before reaching Dugway Mountain, you can see the monument of the Dugway Station about a half mile to the south. There is a deep pit at the site which may have been a storage place or maybe even the station house itself.

From here, the trail winds up the steep rocky slope of Dugway Mountain and down the other side, through perfect ambush country to the flats. Just ahead is a black volcanic knoll to the north of the road where you'll find a monument marking the Blackrock Station site.

From this point, turn south to skirt the sloughs and mud from Fish Springs, then turn north along the foot of Fish Mountain, to Utah Pass Monument. This monument tells of the station located about three-quarters of a mile east near Fish Springs.

Skirting the north end of Fish Mountain, the trail begins again on the bleak flats. Here, near a very small rock outcrop, are the ruins of the Boyd Station house with its gun portals in what remains of the volcanic rock walls. Some arrowheads have been found here and no doubt this station was under siege more than a few times. From these ruins, the small community of Callao can be seen at the foot of the rugged and fascinating Deep Creek Mountains. In the center of the community is Willow Springs Station. The monument is in front of the Bagley ranch gate and the Pony Express buildings here have been painted red and preserved.

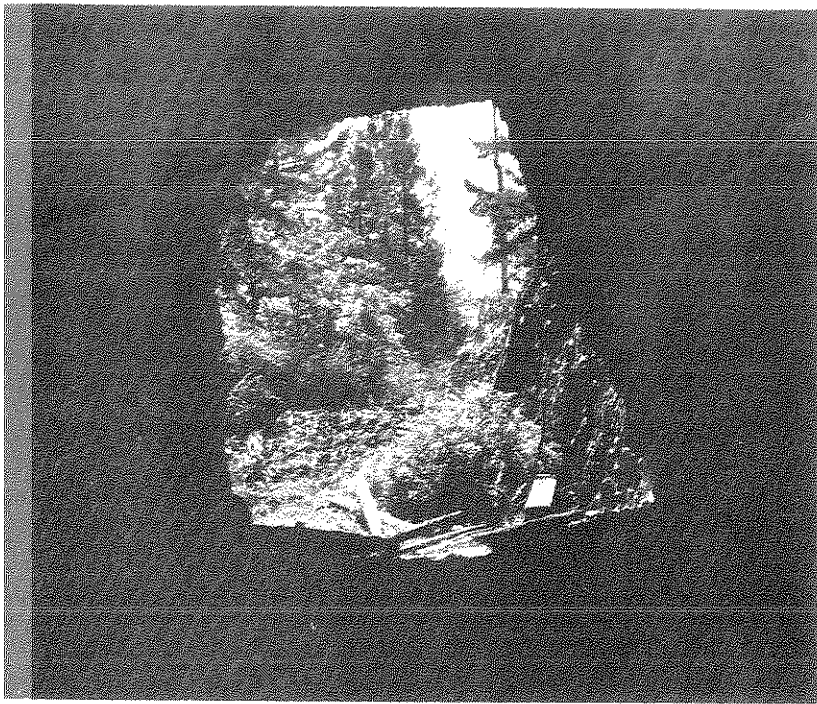
Rider Killed

E. N. Wilson, who rode regularly from Shell Creek, Nev., to Deep Creek, Utah, tells of the time when the rider didn't meet him at Deep Creek so he continued on to Willow Springs where he found out his relief rider had been killed. Shortly after he arrived there, seven Indians rode up and asked for flour. They were offered a small sack, but demanded a sack each. The station keeper refused so the Indians shot one of his cows as they were leaving. The station keeper killed two of them before they could get out of rifle range.

On a dry windswept ridge to the north is Round Station—the only round building on the entire Pony Express Trail because it was built as a fort. A good portion of the wall is still standing and the gun ports are proof of its use as a fort against the Indians. This canyon was a favorite ambush site of the Indians, who many times tried to kill the rider just to find out what he was carrying that made him ride so fast all the time.

At the head of the Canyon in Clifton Flat is Burnout Station or Burnt Station, which was destroyed several times by the Indians. The trail from here goes southwest to the last station in Utah. This is the Deep Creek Station, located on the east bank of Deep Creek at the old Sheridan Ranch in Ibapah. This was one of the larger stations and most of the buildings are still there. Many of these are still used today, including the general store which was started by Major Howard Egan, one of the principal figures in the Pony Express history.

If you've made it this far, you've had a better look at the stations than even the Pony Express riders enjoyed. They were too busy changing horses!



Forsaken Buck Rock Tunnel

A curious staff member uncovers a relic in Oregon & California Railroad history

By Mark E. Lawrence,
Resource Manager, Medford, Oregon

Silent, alone, and almost forgotten are the portals and borings of the uncompleted Buck Rock Tunnel in the Siskiyou Mountains southeast of Ashland, Oreg. Vegetation, caving, and time are slowly overwhelming a tunnel that was meant to usher the bustling wood-burning steam engines of the Oregon & California Railroad through the ridge to the Siskiyou Summit and California.

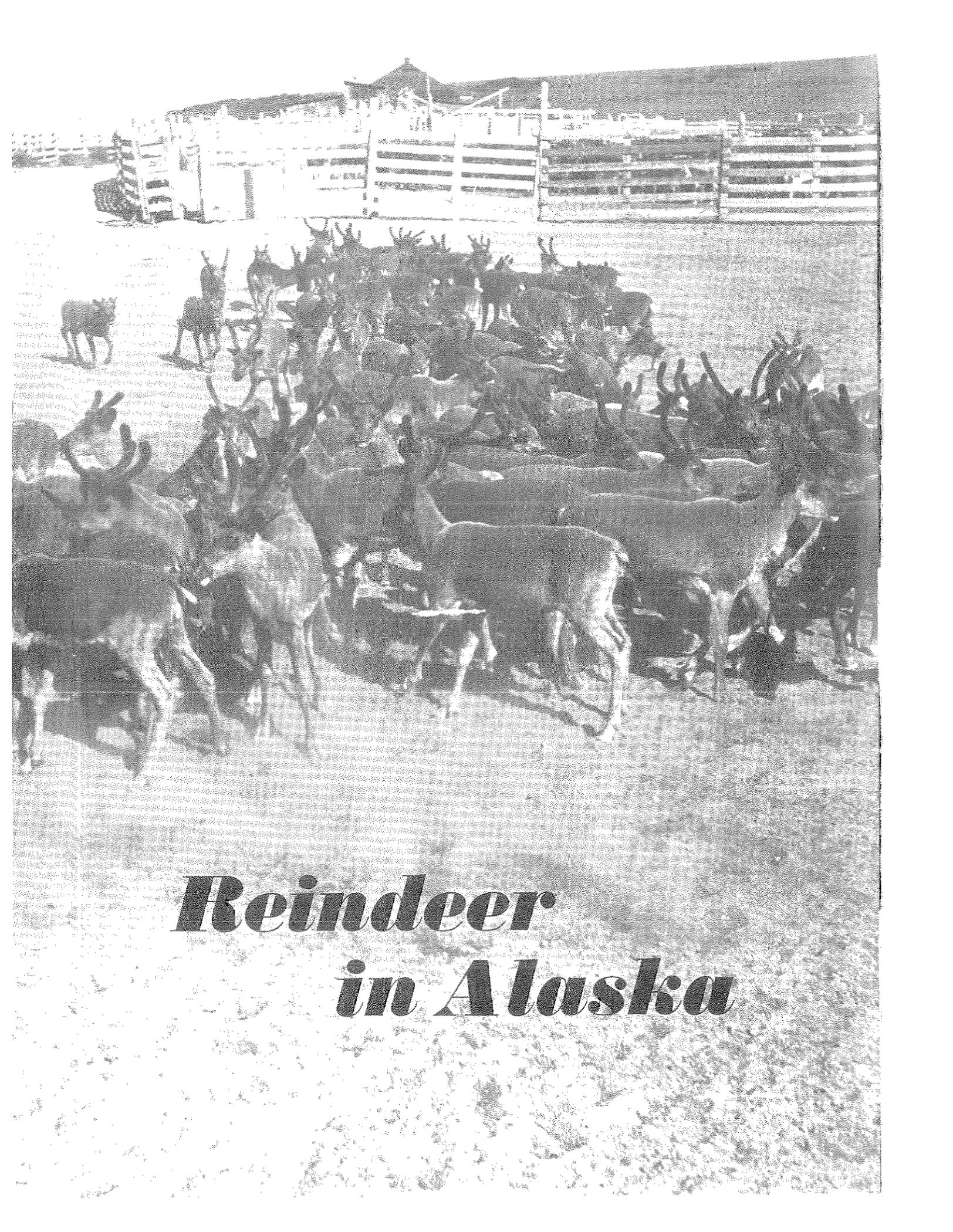
Today, the groaning diesels crawl steadily up the Siskiyou Mountains across the valley on a steeper more crooked route planned by other engineers over high trestles and through curving channels. This steeper route was a source of trouble that did a great deal to bring about another line by way of Klamath Falls and Odell Lake.

Why the 1,650-foot Buck Rock Tunnel was abandoned can only partially be determined from newspaper articles of the era, books, and oldtimers. Engineers who planned the routes are gone. Furthermore, it is understood that many of their records and survey notes were

destroyed in the great San Francisco earthquake and fire of 1906.

At the time of the driving of the golden spike in Ashland, the routes were a source of argument. There were people at the ceremony who contended that the Buck Rock Tunnel route surveyed by engineer John Hurlburt was the best. Behind their argument was the fact that although longer, the route by Buck Rock Tunnel would have been on 2 percent grade and on the sunny slopes where there would have been less trouble with snow and frosty rails.

Modern topographic maps show that they were correct in this assumption and a 2 percent grade could have been followed to the summit via Buck Rock Tunnel rather than the 3.3 percent grade used and approximately 2½ miles saved in distance. Why Chief Engineer Hood of the Southern Pacific decided on the shorter, steeper, and more expensive route per mile, requiring more motive power, is not known. Right or wrong, a decision was made and, when the golden spike was driven in 1887, the fate of Buck Rock Tunnel was sealed.

A black and white photograph showing a large herd of reindeer in a field. The reindeer are of various sizes, with many males having large, dark antlers. They are gathered in a grassy area, some standing and some grazing. In the background, there is a wooden fence and several buildings, including a large barn-like structure with a gabled roof. The scene is set in a rural or semi-rural environment.

***Reindeer
in Alaska***

Santa's sled pullers are livestock—not big game—to our Eskimo friends

By Elmer W. Shaw,
Resource Utilization Specialist,
Anchorage, Alaska

With Christmas approaching, it might be a good time to clear up a few myths about Donner and Blitzen and their reindeer relatives (not all the myths, of course).

In the first place, the reindeer was not indigenous to Alaska. A native of Siberia, it was introduced into Alaska in the 1890's as an extra source of meat for starving Eskimos. Commercial hunters and whaling ships from "outside" had killed most of the whales and walrus, the Eskimos' main source of food.

For several years the reindeer thrived in its new surroundings. By 1936 there were 600,000 head, but overuse for meat and hides, lack of forage, poor management, and wolves caused the population to drop. Today there are about 43,000 head.

A close cousin to the caribou, reindeer often go wild and wander off with migrating herds of native caribou. This mixing with the caribou herds is another cause for the gradual decrease in their population.

Unlike deer, elk, or moose, both male and female reindeer have antlers. Those of the male are slightly larger. The rack of a mature buck tends to make the animal look topheavy. The antlers drop off each spring and a new set rapidly grows out—soft, tender, and covered with thick fuzzy velvet.

Reindeer Roundup

Around Nome on the Seward Peninsula, the natives herd the semidomesticated animals, watch for wolves and other natural enemies, and hold reindeer roundups each summer—much like cattle roundups in the Old West. To aid the growing industry, the Bureau of Land Management has issued 14 free grazing permits covering 8.5 million acres of tundra range on public domain lands. By law, only natives can own the animals and there is no open hunting season on them; reindeer is not considered big game.

On Nunivak Island in the Bering Sea, a slaughterhouse has been built to process local reindeer meat. The steaks, burgers, and sausages are considered a gourmet's delight by tourists. Limited markets are also developing in the "Lower 48."

An epic stock drive began in 1929, when the Lomen Brothers of Nome contracted with the British Government to deliver 3,000 head to the east side of the MacKenzie Delta in Canada. The contract called for delivery within 18 months. The promise of delivery was carried out but not within the time specified. After 5 years of extreme hardship and more than a thousand miles of driving over some of the most rugged terrain in the arctic, 2,370 reindeer were finally delivered. But within a few weeks the spring fawns brought the herd up to the specified 3,000.

Lost 90 Percent

Ninety percent of the animals that originally started the trek was killed by wolves, slaughtered by the herders for food, or died of starvation or accident. Even so, the herd was replenished by the five annual fawnings during the drive.

Most reindeer never become as tame as Donner, Blitzen, Rudolph, and the rest of the Santa Claus team. However, Eskimos have trained some of the more gentle ones to pull dog sleds and carry loads on their back. In Anchorage a reindeer named "Starlet" has been trained to pull a small red sleigh through the downtown area during the Christmas season. But even in Alaska, modern jet planes are rapidly replacing Santa's sleigh.

To Alaskan natives of Kikikterek, the reindeer is a vital source of meat and is not considered big game.



Sheep Graze High on American Flats

By John W. Riley, *District Manager, Montrose, Colorado*
and Norman W. Noble, *Resource Utilization Specialist, Denver, Colorado*

Southwestern Colorado sheep growers still like to tell about the annual race of men and thousands of sheep up steep mountains to the lush forage of BLM's highest range lands. This was before passage of the Taylor Grazing Act of 1934 put an end to grazing on a first-come-first-served basis.

Goal of the race was the American Flats area, a narrow, Alpine strip of grassland squeezed between timberline and the bleak, craggy peaks jutting skyward at 13,000 to more than 14,000 feet.

Here summer grass provided prime sheep range for a few short weeks between melting of one winter's snow and the coming of the next. It is too high for cattle.

Sheep still graze there but it is no longer the four-footed land grab of earlier days.

Some things haven't changed much. The towering mountain peaks are as they have been for centuries. The grass is still lush and green and sheep continue to fatten on it but the rules are different. The sheep are still there for about 6 weeks.

In early days up to six bands of sheep passed daily through the Alpine corrals, crossed Uncompahgre National Forest, and started a 15-mile race to previously scouted choice meadows and slopes of BLM grazing land.

Tempers Boiled

Pressure from men and sheep behind, herds passing on the trail, and bands trying to move ahead of others during the night caused many herds to mix and tempers to boil. There are no records of homicide, but the struggle was rugged for the first ones to the Flats country got the choice range.

Key to the race was dogs. Good dogs take much work out of sheep trailing and herding, but here they were used to force the sheep to keep moving when they preferred to stop and rest. When the dogs tired or became footsore, sheep owners moved in fresh ones to keep up the fast pace.

Hard on herders and campmovers; rough on pack-horses, sheep, and dogs? Sure, but it was worth it. The stake was prime sheep range and the herds were eased out, fat and lazy a few weeks later.

Now the picture has changed to protect the range and provide maximum benefits to users. Where permittees pushed almost 32,000 sheep up to the high country and fought for grazing areas, BLM now licenses 14 operators to graze 27,176 sheep in individual allotments. They now take only 14,715 sheep months (one sheep for one month) of forage. Just 15 years ago the figure was 72,140 sheep months.

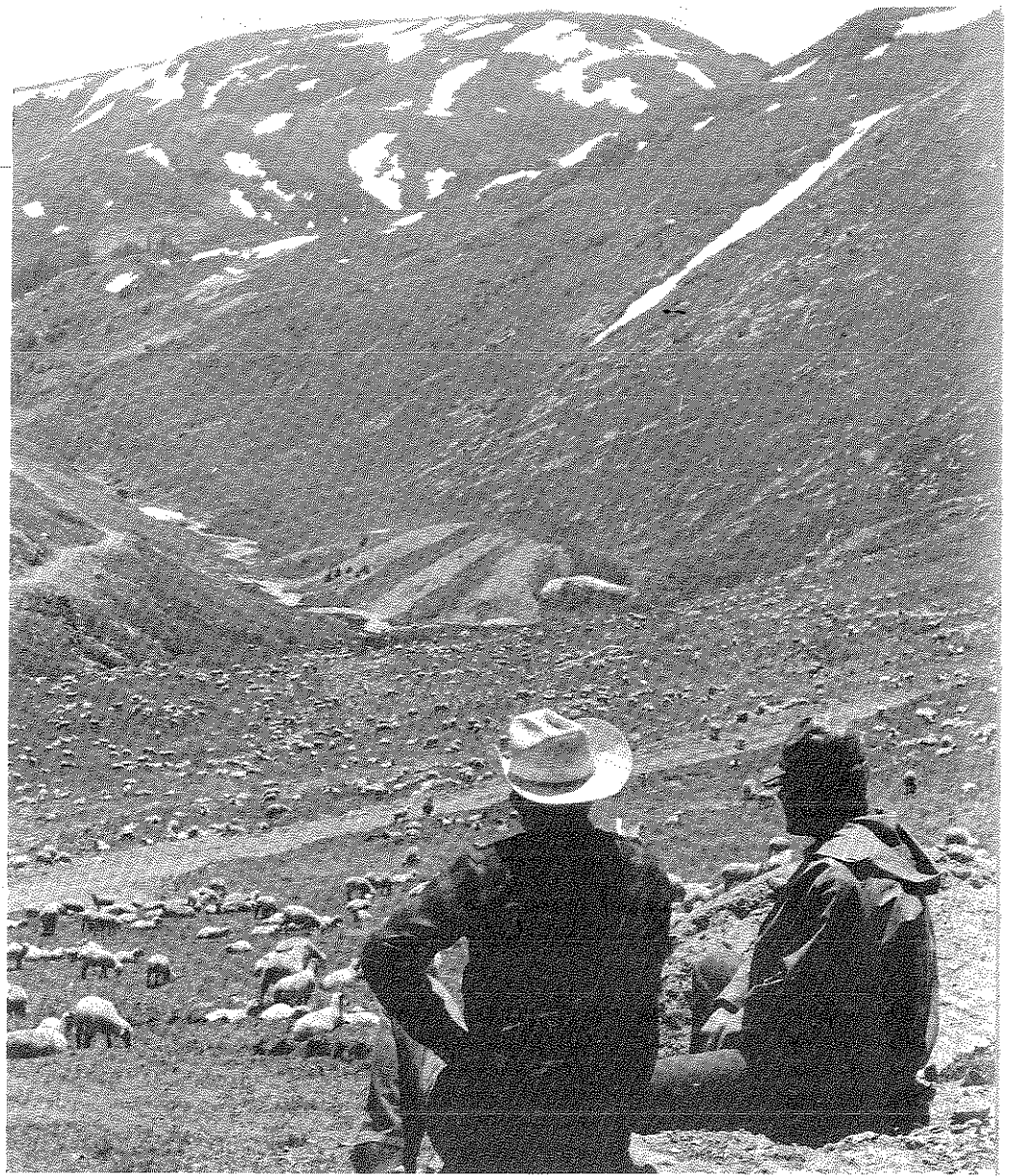
American Flats itself is a small area around American Lake, nestled at 12,000 feet between Engineer mountain, the Dolly Varden mountains, and Wild Horse peak. But it has given its name to a much larger grazing area in the vicinity containing 151,296 acres. Of this, 123,404 acres are public lands and 27,892 private lands, predominately mining claims in a jumbled land pattern resembling match sticks dropped carelessly on a map.

Multiple-Use Program

The American Flats, together with the Lake Fork recreation area in the same vicinity, is an excellent example of BLM's multiple use program. Spread over portions of Hinsdale, San Juan, Ouray, and La Plata counties, it is not limited to sheep grazing and mining claims. It is also valuable as a watershed and for recreation.

Handies, Red Cloud, and Sunshine Peaks exceed 14,000 feet elevation and many more are above 12,000 feet. Snow covers the entire area until about the Fourth of July and snow, packed by slides, can be found throughout the year in protected spots. Tourists and sheep alike are forced out about Labor Day by new snow. The rainy season is from July 15 to September 15 and local residents claim only two seasons for the area—winter and August.

Pastoral scenes are still very much a part of this Colorado area's appeal to tourists



Much of the water of the Colorado River comes out of this BLM high country. The Animas River, a major tributary of the San Juan, starts just above the old mining town of Animas Forks. The Uncompahgre River heads on the north slope of 13,447-foot Hurricane Peak and flows in to the Gunnison River at Delta, Colo. The Lake Fork of the Gunnison originates on the west side of Handies Peak in American Basin. It flows into Lake San Cristobal above Lake City and finally into the Colorado at Grand Junction.

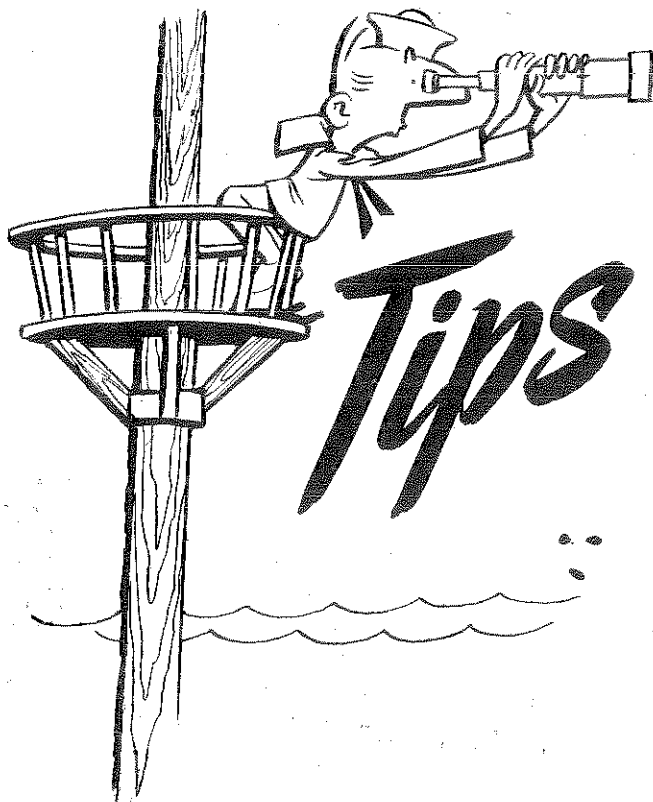
Slumgullion Mud Flow

Down below and part of the Lake Fork Recreation Area is Lake San Cristobal, formed hundreds of years ago by the Slumgullion Mud Flow, itself a unique attraction where the land slipped down a mountain slide

for 4 miles. A second flow is still active in the region.

Many abandoned townsites and ghost towns such as Animas Forks, Howardsville, Eureka, Burrows Park, White Cross, Sherman, Rose's Cabin, Henson, and Capitol City are reminders of extensive gold and silver mining activities of the 1870's and 1880's. Mines like the Highland Mary, Shenandoah, Big Giant, Treasure Mountain, and scores of others, show why miners thought Capitol City, in Hinsdale County, would be the capital of Colorado. Now, all that remains of Capitol City is a deteriorating cabin or two, and Hinsdale County has the smallest population of any county in the United States.

Gone are the miners, the thriving mining towns, and most of the mines, but the sheep still graze high on the American Flats.



for Land Seekers

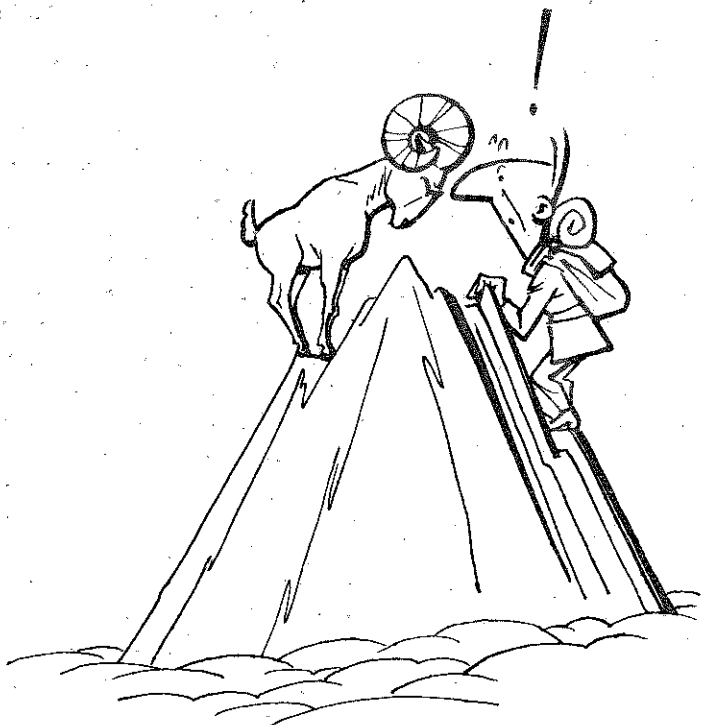
YOU want to buy a public land tract, don't you? But you're frustrated, aren't you? We recommended that you subscribe to *Our Public Lands* so you would have a list of lands for sale each quarter, and you did just that. After you read the first list, you were advised to contact the land office of the particular State to start bid proceedings, and you did that, also.

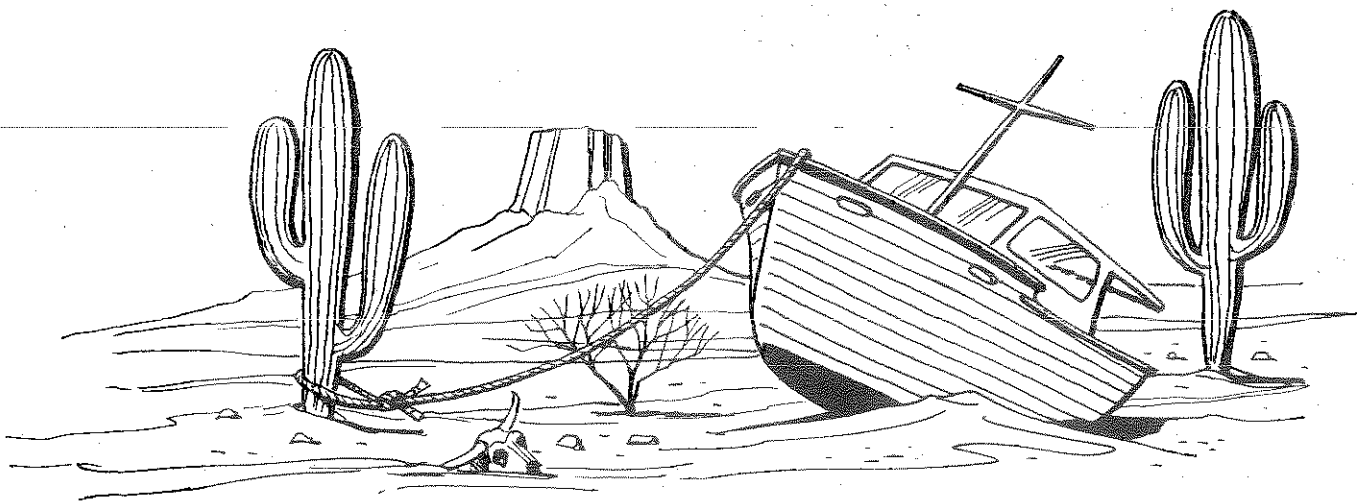
But lo! In many cases you were told that the land was taken off the market and that's where frustration began to set in. But remember, most of the tracts taken off the market will be placed back on the auction block very soon. Some are already back, as shown on pages 22 and 23 of this issue. They were re-inspected to make sure that the sales conformed to new public land laws passed by Congress last year. Judging from the present inventory of small tracts and isolated tracts, the Bureau of Land Management will be selling scattered pieces of land for many years to come.

Before going further, however, you should know all the facts. The following advice might help:

1. *Seldom are tracts found on mountain-streams or lakes.* Most are arid or rocky—rough and mountainous, in some cases—and generally far from any community. But thousands of outdoor lovers have already bought many just like them. Since 1955, nearly 55,000 people have bought tracts averaging $2\frac{1}{2}$ to 5 acres in size, mostly in southern California, for weekend camping or summer or winter vacations. Some who bought a site for vacations are now living there year around, either after retirement, or commuting many miles to work (one man commutes every week from Detroit).

2. *Don't expect any free land.* There's no such thing these days, not even from the Government. Such lands are never sold for less than their appraised value and all are sold on a bid-auction basis. This means that a combination sealed bid-oral auction is used.





3. *Watch for "auction fever" when the bidding starts.* You don't have to be present for the auction, of course. You can send in your bid and hope no one bids past your mark on auction day. But if you do attend the auction, don't play "Government land roulette" and get carried away with the auction spirit. There are cases of people bidding past their bank account or beyond the value of the tract, and some people even start bidding against themselves!

4. *Look before you leap.* Remember, BLM sells two types of lands: "small tracts" and tracts under the public sale acts. Many times, the public sale tracts are isolated and you have to get permission from an adjacent landowner to cross his property to even reach your land. A professor with the University of California paid nearly \$12,000 for 120 acres before realizing that he couldn't gain legal access to his property, although this fact was suggested to him repeatedly as the bidding progressed.

In most cases, there is no water and you'll have to buy water from haulers in the area. Theft can be a problem, too, in areas of sparse population. One man spent all one week transporting building materials to his tract. When he returned the following week, every board and nail had vanished. It may be wise to take advantage of some of the security patrol services.

5. *Know about "preference rights" on isolated public sale tracts.* When such a tract is placed on the market, adjoining owners can assert their preference rights and purchase the land at the highest bid submitted, or for three times the appraised price, whichever is lower.

Tracts for sale are in relatively new areas, with no improved streets or modern utilities—not even drinking water available. That's why they suit the vacation-minded buyers rather than the family looking for a place to live. Rest assured, anyone looking for "plenty

of outdoors" is seldom disappointed when buying a tract from the public domain—not even a hermit!

Many city dwellers find a tract in the California desert, for instance, a Shangri-la of sorts during the winter. Others use their vacation home as a base for traveling the West and exploring new scenery. A highway patrolman in Utah built a small structure near Dugway and uses it mostly as a hunting cabin. Some 20 Salt Lake City residents use their sites near Wasatch National Forest only for summer vacations, as the area is not accessible during winter.

Place To Think

But not all small-tract buyers are vacation minded. A land office employee came across one man lying face down on his Arizona property sobbing. He explained that he "just had to have some place away from people and troubles to think things out." It's not too unusual, either, to see a boat moored in the California desert miles away from water. These belong to small-tract owners who use their site only as a boat dock, saving miles of hauling from Los Angeles to the Salton Sea.

Because city ordinances prohibit the keeping of horses, some residents of Ajo, Ariz., bought small tracts only for use as stables.

Good View

A resident of Napa County, Calif., who lived a quarter mile away from an offered tract, bid \$10,000 for it just to retain an unobstructed view of the countryside!

In fact, BLM officials run into a new motive every day. A family of five at Riverside, Calif., came in recently and bid on five different tracts adjacent to each other. Did they want a family community? Not at all. They built an airplane runway.

PUBLIC SALE BULLETIN BOARD

This is a compilation of the most up-to-date information possible on transactions and future sales of public lands by land offices of the Bureau of Land Management. Any details on land descriptions, prices, and other information pertinent to sales must be obtained from the individual land offices. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Any sale listed can be cancelled on short notice, due to many administrative and technical reasons, so interested purchasers should always check with the local land office.

Please note: Adjoining landowners have preference rights to buy "Public Sale" tracts. They can buy these tracts by matching the highest bid within 30 days after the auction. "Small tracts" are handled differently—strictly on a bid-auction basis, one to a party. If you submit the highest bid at auction time, the small tract is yours.

ARIZONA

Public Sale Tracts

Graham County.—Two tracts, 33 and 40 acres. Two miles northwest of Safford, rolling terrain near the Gila River. Utilities close by. Value: \$25 to \$50 per acre.

LAW of the LAND



No one may take a tree for any purpose from the public lands without a permit from the district manager of the Bureau of Land Management.

Yuma County.—Eighty acres in eastern part of county. Eighty-five acres northwest of Yuma, level desert land. Utilities in area. Value: \$50 per acre.

Maricopa County.—320 acres in western section in Harquahala Valley. Located 70 miles west of Phoenix, level desert land, utilities several miles from tract. Value: \$50 to \$200 per acre.

Navajo County.—135 acres, located 10 miles west of Snowflake and 20 miles northwest of Snowflake. Rolling land with juniper-covered ridges, within 2 miles of highway and utilities. Value: \$35 to \$400 per acre.

Santa Cruz County.—Forty acres, about 3 miles east of Sonoita and 10 miles west of Fort Huachuca. Gently rolling grassland crossed by a highway and railroad. Utilities within several miles. Value: \$250 to \$350 per acre.

CALIFORNIA—RIVERSIDE OFFICE

Small Tracts

Approximately 50 small tracts to go on market during October, 125 in November, and 200 in December. They are located at Twenty-Nine Palms, Yucca, Lucerne, Apple Valley, Dillon Road area and Adelanto; 2½ to 5 acres, valued at \$300 to \$2,000 per tract. Level to rolling desert land. Power available in most locations, but water is limited.

Public Sale Tracts

None scheduled until after January 1, 1966.

Townsite Sales

Sales of 114 tracts to begin in October. Tracts located in Argus and Point of Rocks, San Bernardino County. Size: 6,000 to 11,000 square feet. Value range: \$350 to \$800 per lot. Level to undulating land. Water and electricity available.

CALIFORNIA—SACRAMENTO OFFICE

Small Tracts

Fifteen to go on market during October. Located west of Redding in Shasta County, 2 to 7 acres each, valued at \$1,500 to \$4,000 per tract. Brush and oak cover, level to rolling land. Electricity available. No water.

Public Sale Tracts

Two to be sold in October, three in November and three in December, located in Mother Lode counties; 40 to 160 acres each. Rough and mountainous, brush cover, scattered timber. Valued at \$25 to \$800 per acre. No utilities.

COLORADO

Small Tracts

Eighteen tracts from 1 to 7 acres each in Boulder area. Approximately 3 miles northwest of the city, near small settlement of Crisman. No domestic water. Electricity and telephone services available. These lands are located in mountain tract areas that are being developed into year-round residential section.

Public Sale Tracts

Eight tracts located in same general area as Boulder small tracts. Size varies from slightly over 3 acres to about 16 acres, with appraised value of \$1,000 to \$8,000. No domestic water. Electricity and telephone services available. Located in mountain tract areas that are being developed into year-round residential section.

LOUISIANA

Public Sale Tracts

Fourteen tracts to be offered totaling 57 acres. Valued at \$35 and up. Scattered over the State. Some upland sites and some rather wet.

MONTANA

Public Sale Tracts

Eighty acres in Prairie County, valued at \$1,140. Forty acres in Hill County, valued at \$800. Eighty acres in Hill County valued at \$1,600. Twenty acres in Blaine County valued at \$400. Eighty acres in Fergus County valued at \$1,075. All are grazing lands.

NEVADA

Public Sale Tracts

Isolated tract of 120 acres 17 miles north of Gerlach, Nevada to be offered at minimum appraised value of \$1,470. Located in Granite Basin. Level, irrigable soils, no utilities. Legal access is doubtful.

Isolated tract of 320 acres 50 miles southwest of Winnemucca. Valued at \$3,840. Land is moderately sloping. Agricultural development limited in scope. No public utilities. Legal access is undetermined.

Forty acres of isolated land 6 miles east of Sparks on slope of Truckee River. Valued at \$700. Rocky soils on steep slopes. No utilities. Legal access is questionable.

NEW MEXICO

Public Sale Tracts

Dona Ana and Luna Counties—sale to consist of five parcels, containing from 40 to 161 acres, appraised from \$520 for the 40-acre parcel to \$10,500 for the 161-acre parcel. Lowest price parcel suitable only for grazing due to rocky soils. Remaining parcels suitable for varying degrees of cultivated farming. No utilities available at present.

Sandoval County.—One tract of 800 acres, appraised at \$8,800. Located in isolated area on the Rio Puerco, with only

seasonal access at present time. Land mostly suitable for grazing. No utilities available.

DeBaca County.—Eight parcels, six of which contain 40 acres each and one of 80 acres and another of 320 acres. Valued from \$9 to \$12 per acre. Lands principally suited for grazing. No utilities.

OKLAHOMA

Public Sale Tracts

Four parcels in Ellis and Roger Mills Counties; 40 acres to 76 acres, with values ranging from \$8 to \$18 per acre. Sandy and brush river bottom land along the Canadian River suitable for grazing only. No utilities.

OREGON

Public Sale Tracts

Twenty-one tracts remaining in continual sale offering, which will close on November 9. Tracts vary from 40 to 640 acres, valued from \$25 to \$50 per acre. Located in Umatilla County in the Hermiston area. Desert in character, but some have agricultural potential if water could be supplied. Larger tracts accessible. Telephone and electricity available. If these tracts are not sold by November 9, they will probably not be reoffered until following spring.

UTAH

Public Sale Tracts

Five hundred and sixty acres to be sold on October 20. Land located in Carbon County 5 miles east of Price. Rough and mountainous-type land of low productivity. No utilities.

Bureau of Land Management Land Offices

ALASKA:

555 Cordova Street
Anchorage, Alaska 99501
516 Second Ave.
Fairbanks, Alaska 99701

ARIZONA:

Federal Bldg., Room 204
Phoenix, Ariz. 85025

CALIFORNIA:

Federal Bldg., Room 4017
Sacramento, Calif. 95814
1414 8th St.
Riverside, Calif. 92502

COLORADO:

700 Gas & Electric Bldg.
Denver, Colo. 80202

IDAHO:

323 Federal Bldg.
Boise, Idaho 83701

MONTANA

(N. Dak., S. Dak.):

Federal Bldg.
316 N. 26th St.
Billings, Mont. 59101

NEVADA:

560 Mill St.
Reno, Nev. 89505

NEW MEXICO (Okla.):

Federal Bldg.
Santa Fe, N. Mex. 87501

OREGON:

710 NE. Holladay
Portland, Oreg. 97232

UTAH:

Third Floor, Federal Bldg.
125 South State St.
P.O. Box 11505
Salt Lake City, Utah 84110

WASHINGTON:

670 Bon Marche Bldg.
Spokane, Wash. 99201

WYOMING (Nebr., Kans.):

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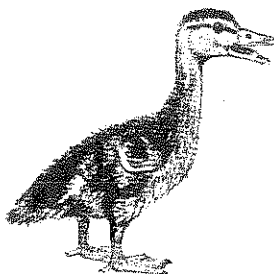
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