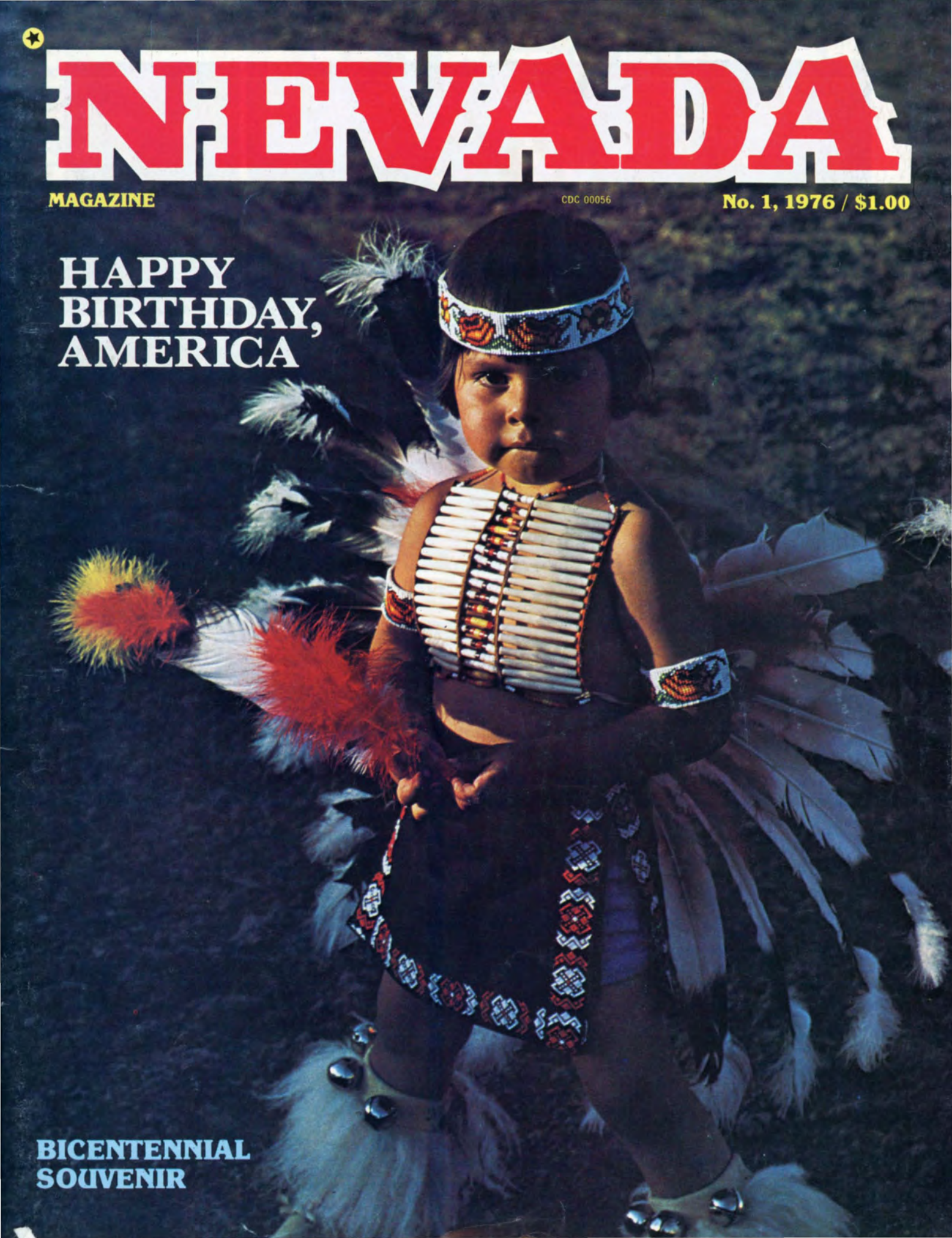
# NEVADA

MAGAZINE

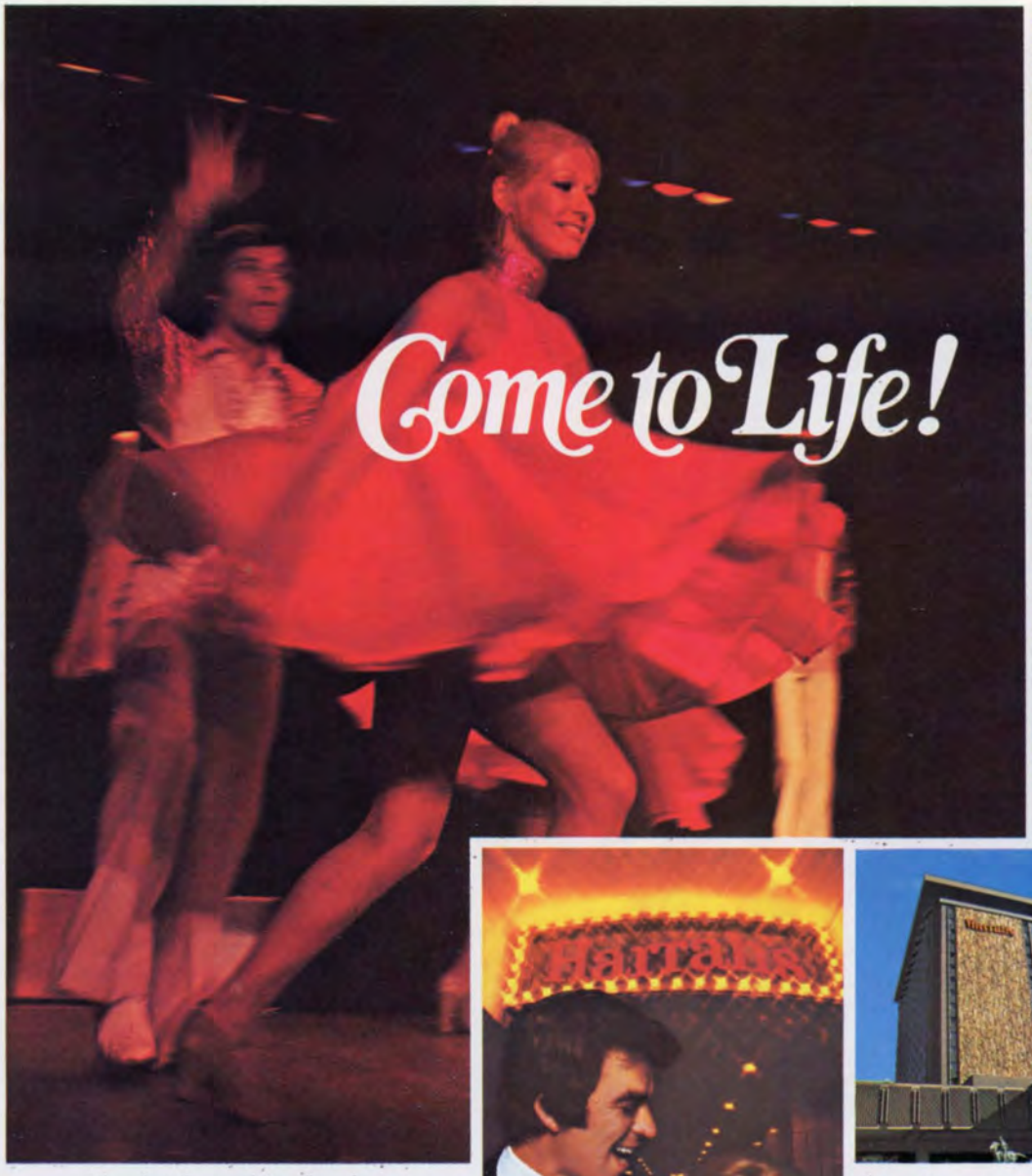
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*A look at the ghost town of Bullfrog.*

*A striking photo-essay of the Carson River area.*

49 PRINTED IN U.S.A.

# NEVADA

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**ON THE COVER**
Russell Dale Brigham, known as "Fat Man" on the Fallon Indian Reservation, is a Paiute-Shoshone and one of 9,000 Nevada Indians who live on 23 reservations within the state. Each tribe is autonomous and ruled by its own Tribal Council. Legend says that white people came from Europe, black people from Africa, while Indians came from America. There is archaeological proof that native Americans did inhabit the land known as Nevada 15,000 years ago. (Costume and beadwork were made by his mother Mildred G. Brigham and grandmother Iola Byers of the Fallon Indian Trading Post. Photo: C. J. Hadley.)

# Editorial



Guy Shipler



Connie Emerson



Mary Matrille



La Verne Rollin



Caroline Hadley



Julian Stone

"The State has nothing of value except her mining interests, and as these are beginning to decay, the people are forced to go elsewhere for support. Nevada is nearly as large as Ohio, Indiana and Kentucky combined, but in all its vast area there is not as much good agricultural land as many single counties of the former States afford. The soil is not even suitable for grazing, unless cattle and sheep learn to live on sand and sage grass."

These words are from **Edison's Handy Encyclopaedia of General Information and Universal Atlas** compiled by Thomas F. Edison and published in 1895.

The dire description continues: "Lonely mountains and lengthy deserts offer little promise to settlers and Nevada is destined to remain to us wild and bleak Fifty years from now the State will probably not have reached a population of 100,000. Nevada's statehood has already been the subject of criticism. She ought never to have been admitted into the Union. Either Arizona or Wyoming is better fitted for membership, but having been brought in, we cannot put her out again, and she remains the only State not gaining in inhabitants, but nevertheless on an equal basis in the Senate with the greatest and most populous Population — census of 1890, 45,761."

This issue of **Nevada Magazine,** a tribute to the state's 112 years and America's 200, proves Edison's predictions wrong. He was close, however, in one statement: Nevada's population did not exceed 100,000 until the 1940 census (45 years after Edison's writings).

Today's population of over 550,000 is composed of fighting people who have overcome all kinds of odds to put Nevada in a place of its own where proceeds from gaming, mining and agriculture have reached fantastic heights. Transportation, banking, warehousing and entertainment have also kept pace and added to the state's healthy economy.

How it all came about is explained more fully in the following pages. Thanks are due to the Nevada Historical Society (which was especially helpful with both information and photos), the Department of Agriculture, Division of Water Resources and the Bureau of Mines.

Gaming, always at the top, showed a $1 billion profit in 1974 and contributed $93 million in local, state, and federal taxes. The state's share was half of Nevada's budget. Mining authorities report $248.2 million in value for the same year while agriculture showed a $136.5 million gross — not too bad for a state where "The soil is not even suitable for grazing "

Besides six "then and now" features as a Bicentennial tribute, this issue also includes some other interesting stories. Guy Shipler explores geothermal energy and there is a picture story on the Valley of Fire by Caroline J. Hadley. **Hang Gliding** provides sport reading and some spectacular photos; and Connie Emerson talks about Nevada's ethnic heritage. Connie also designed the State Seal in needlepoint for this issue. Joe Midmore did extensive research for the **Banking** story. Mary Matrille wrote **Transportation;** La Verne Rollin of the Bureau of Mines wrote **Mining.**

We hope you will keep writing to let us know what you want to see and what you think. We hope, too, that you will find this issue special.

Judy Casey, Acting Editor

# Letters

### MORE HISTORY

I like the new format of your publication but please do not pass up some of the good old Nevada tales that formerly graced your pages. I was brought to Nevada before I was a year old in 1897 and grew up in Elko and Reno The sagebrush sprouts annually between my toes.

P. F. Brown
Greenbrae, CA.

### LOVE . . .

Dear Mama and Linda:
If you would like to do something real nice for my birthday, I sure would like to continue to get Nevada Magazine. Just thought you might like to know.

Lila King
Salmon, ID.

Loved your latest magazine (#4, 1975). The expanded version is truly great. I do hope, though, that you will continue printing historical articles pertaining to Nevada's past.

Philip Tow
Pleasant Hill, CA.

I wish to compliment you on the recent issue. The text and photographs were most interesting. I particularly enjoyed the article on the Nevada State Museum and feel it is high time this very excellent institution should be singled out for recognition.

Mrs. William H. Rendall
Carson City, NV

### AND HATE?

We just do not see the Nevada we love in Nevada's magazine. We are puzzled. We would enjoy seeing our State magazine, like Arizona's, divulging truths, legends, facts of tourist and native interest and exploratory trips into Nevada's unique past, not the calm brochure it's become.

Terry Raul duPont III
Fallon, NV

Your magazine has been a source of enjoyment for years and I expect it to be in years to come, but your article on Big Game Hunting in your last issue left me ill. The animals Mr. Fredi so happily kills are not his animals, but ours, and I resent it.

Anne H. May
Pacific Grove, CA.

I have received my Nevada Magazine and would like to congratulate you on the expanded size and photography. I feel though that the magazine has lost something because all the articles are short, somewhat superficial and seem to be a chamber of commerce folder for visitors. I enjoyed these but have also looked to your magazine in the past to have some meat in the articles. I hope that this change will not be permanent.

Lane Ely
Griffin, GA.

### ERRATA

All stickers are not cactii. You should correct captions and statements made in your #4, 1975 issue. The Yucca is no relative of the cactus, it belongs to the Lily family; the Monkey Tail Cactus and the Spanish Dagger Cactus are not cactus; the Joshua Tree is also a member of the Lily family. The Ocotillo and the Boogum tree are not cactus either, they are "Fouquieriaceae."

Unsigned

It is most unfortunate that you chose to promote a publication with so many bloopers that are inexcusable. Amber is of vegetable origin, ambergis of animal origin. The choker necklace on page 10 is **not** a squash blossom. That's a sample of things that should never have happened.

Mrs. A. Palmer
Imlay, NV

### AFTERTHOUGHT

It was with regret that I canceled my Nevada magazine, having received it since it was first sent out free to all who asked for it, but it had started to lose some of the format that I enjoyed reading. After I had sent in my cancelation on a Thursday, Friday's mail brought my Nevada magazine and I immediately saw a change and regretted my impulsiveness in sending in my cancelation. Here is $4 to renew for 1976. Please renew for 1976.

Keep up the good work of including such interesting articles as the Tom Marvel story and the camping and touring article.

Ann Helweg
San Francisco, CA.

All good wishes for success with this interesting publication. With imagination, hard work and some state funds you could give Arizona Highways a run for their money!

Hunter Borthwick
Las Vegas, NV


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Warren Lerude
*Reno Evening Gazette*

" may well be the most comprehensive personal account of the predatory and essentially amoral life of the California Gold Rush and the Nevada Silver Rush."

W. H. Hutchinson
*San Francisco Chronicle*

" a unique and immensely valuable document for the social history of the frontier West . No other record is so filled with the sharp, immediate, blunt facts of life on the mining frontier bursting with the stuff of real life an extraordinary chronicle."

Kenneth N. Owens
*The Sacramento Bee*

**Gold-Camp Drifter: 1906-1910**
***by Emmett Arnold***
***A Bristlecone Paperback***

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**University of Nevada Press**
**Reno, NV 89507**

# Nevada Calendar

## JANUARY

| | | |
|---|---|---|
| • | **American Ballet** | Carson City |
| **1-30** | **UNLV Gallery Art Show** | Las Vegas |
| **3-4** | **"Snowshoe Thompson Mail Run" – Placerville to Genoa** | Genoa |
| **6-8, 12-14** | **Stage Play – "Ready When You Are"** | Reno Little Theater |
| **7** | **Sierra Tahoe Pro Ski Races** | Squaw Valley |
| **9** | **Shriners Magic Show, Convention Center** | Hawthorne |
| **9** | **American Folk Ballet, 8:00 PM – Community Auditorium** | Carson City |
| **9 - March 7** | **Polar Bear Classic Bowling Tourn. (weekends only)** | Elko |
| **10** | **American Folk Ballet, Cal Neva Lodge** | Incline Village |
| **10-11** | **U.S. National Ski Jumping Championship** | Squaw Valley |
| **10, 11, 17, 18** | **Nevada Dance Theater Ballet, UNLV** | Las Vegas |
| **14** | **Globetrotters Exhibition, Centennial Coliseum** | Reno |
| **16-17** | **American Folk Ballet, Pioneer Theater Auditorium** | Reno |
| **17-18** | **Bicentennial Rodeo & Western Days** | Boulder City |
| **21** | **Sierra Tahoe Pro Ski Races (evening)** | Boreal Ridge Ski Area |
| **28** | **Sierra Tahoe Pro Ski Races (2nd Annual Challenge Cup)** | Northstar Ski Area |
| **31 - Feb. 1** | **11th Annual Bottle Show & Sale "The Spirit of 76 in Glass"** | Las Vegas Conv. Center |

## FEBRUARY

| | | |
|---|---|---|
| • | **BPW Hobby Show** | Winnemucca |
| **2-8** | **Del Webb Mid-Winter Trapshooting Tournament, Mint Gun Club** | Las Vegas |
| **2-13** | **Tom Holder Faculty Art Show, UNLV** | Las Vegas |
| **4-5** | **Seattle Repertoire, Pioneer Theater Auditorium** | Reno |
| **6-8** | **Winter Carnival, UN Reno** | Reno |
| **7** | **Snow Festival (skiing, contests, games, sledding)** | Ward Mt. White Pine Co. |
| **8** | **Las Vegas Chamber Players, 2:00 PM Judy Bailey Theater UNLV** | Las Vegas |
| **8-24** | **Reno Boat & Recreational Vehicle Show, Centennial Coliseum** | Reno |
| **10** | **Miss Carson City Pageant, Community Center** | Carson City |
| **13, 14** | **Verdi's "Falstaff" Pioneer Theater Auditorium** | Reno |
| **14** | **Heritage Costume Ball – Elks Lodge** | Boulder City |
| **16** | **ACBL Bridge Club Bicentennial Charity Club Tourn. 7:00 PM** | Hawthorne Conv. Center |
| **17-22** | **American College Theater Festival, Regional Comp. UNLV** | Las Vegas |
| **17-27** | **Bill Richie Art Show, UNLV** | Las Vegas |
| **18** | **Sierra Tahoe Pro Ski Races** | Mt. Reba, Bear Valley |
| **25** | **Sierra Tahoe Pro Ski Races (evening)** | Homewood Ski Area |
| **27-29** | **Circlet Theater Productions "American Primitive"** | Reno Little Theater |

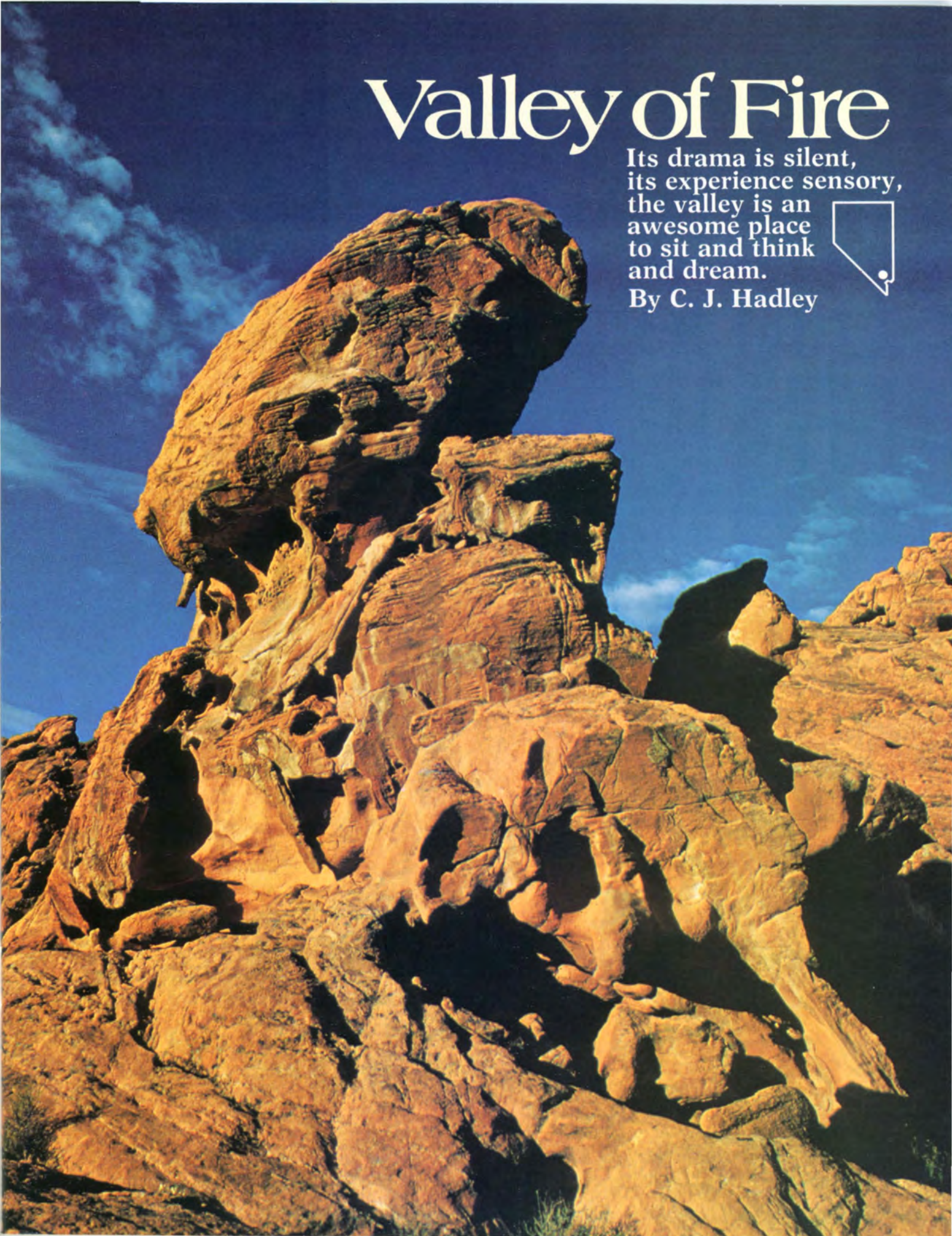
## MARCH

| | | |
|---|---|---|
| • | **Miss White Pine County Pageant** | Ely |
| • | **Sierra Tahoe Pro Ski Races (evening)** | Homewood Ski Area |
| • | **St. Patricks Fair, Armory, St. Paul's Catholic Church** | Winnemucca |
| **1-12** | **Bien Sien Lee Art Show, UNLV** | Las Vegas |
| **2** | **Las Vegas Chamber Players, 8:00 PM Judy Bailey Theater UNLV** | Las Vegas |
| **3** | **Sierra Tahoe Pro Ski Races** | Alpine Meadows |
| **4** | **Western Opera Theater "The Marriage of Figaro" 8:00 PM UNLV** | Las Vegas |
| **4-7** | **Amateur Trapshooting Assn. Winter Chain Shoot, Harolds Trapshooting Club** | Reno |
| **11** | **Germain Greer lecture on "Feminism & Fertility" 8:00 PM UNLV** | Las Vegas |
| **12-13** | **Sweet Adelines, Inc.** | Reno |
| **14-15** | **Daughters of the Nile Thieves Market** | Reno, Coliseum |
| **15-26** | **Walt McNamara Drawings, Sculptures, UNLV** | Las Vegas |
| **24-27** | **Jazz Band Festival** | Reno |
| **24-28** | **Antique Show, Centennial Coliseum** | Reno |
| **26-28** | **Stage Play "The Night Thoreau Spent in Jail"** | Reno Little Theater |
| **27** | **AAUW Bicentennial Art Show, Convention Center 1-8:00 PM** | Hawthorne |

## SUMMER HIGHLIGHTS (full schedule for April, May, June in next issue)

| | | |
|---|---|---|
| ***April** | **Winnemucca National Open Chukar Shooting Dog Trials** | Winnemucca |
| ***May** | **Helldorado Days** | Las Vegas |
| ***May** | **Jim Butler Days** | Tonopah |
| **May 4-9** | **Golden West Grand American Trapshooting Tournament** | Reno |
| ***June** | **Nevada Open Horse Show** | Winnemucca |
| ***June** | **Silver State Stampede** | Elko |
| **June 5-6** | **Auto Hill Climb** | Virginia City |
| **June 12-13** | **Carson Valley Days** | Minden-Gardnerville |
| **June 17-20** | **Reno Rodeo** | Reno |
| ***July** | **Basque Festival** | Elko, Ely |
| **July 3-4** | **Indian Tribal Pow Wow, Bicentennial Community Daze** | N. Las Vegas |
| **July 14-18** | **Pacific International Trapshooting Grand Pacific Tournament** | Reno |
| **Aug. 8-9** | **White Pine Horse Show** | Ely |

*Actual dates not yet established. Check with local chambers of commerce.



# Valley of Fire

**Its drama is silent, its experience sensory, the valley is an awesome place to sit and think and dream.**

**By C. J. Hadley**

Over five hundred million years old, the Valley of Fire has a mystical presence. It's a presence that haunts the Beehives and Elephant Rock; an aura that clings to the petroglyphs left by a people from long ago; a feeling that floats on the cliffs above Mouse's Tank and hovers over Rainbow Vista.

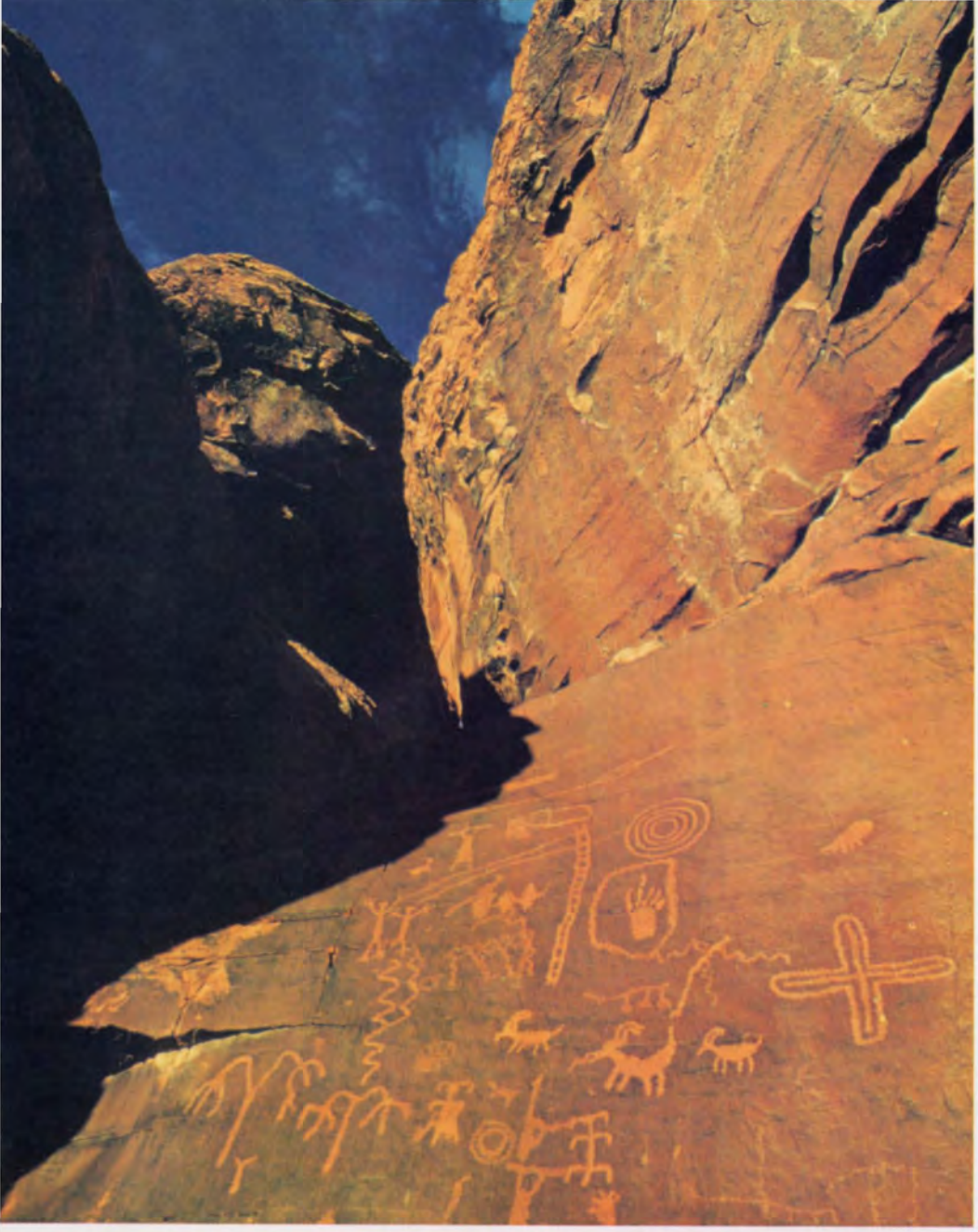
Not an area to glance at quickly nor speed through on wheels, but a place of peace to inhale and savor, the Valley's rocks are red and white, pink and orange, apricot, purple and blue. Its shapes and textures of crinkled rock are in forms so weird a cursory look could miss its subtle beauty. In summer temperatures soar over 110 degrees, the nights are seldom cooler than the days and as the sun moves patterns change, and the shadows cast are black against the rosy hues of dust and stone.

The ancient region is perhaps an alien spot to the modern man who seeks convenience. The Valley is a place to sit and think, to dream, to look and learn and feel the presence of the past. The sparseness; the scattered plants that never crowd, their own particular knowledge



Hadley photos







of survival keen, taking as little space as possible, clutching the shade of the rocks or the base of the starkly exquisite silica mountains. The greens and yellows and pinks of the plants are in startling contrast to the barren pile of mutable rock that is vast and lovely in its own right.

Desolate it's not, although abandoned it seems. Reptiles, insects, animals all claim a piece of the Valley. There are bighorn sheep, bobcat and coyote. Some are vegetarians, others predators who live on the tortoise, snakes, lizards or squirrels which inhabit the Valley. The fauna is mostly nocturnal because of the intense summer heat and shortage of moisture, which usually comes from light winter rains and flash summer floods that annually add up to all of four inches.

Somebody once said that life in the Valley of Fire was adapted through adversity, secured through ingenuity and perpetuated through persistence. The fact that people once lived there and that it was used as a hunting ground is proven with its many petroglyphs, projectile points and crudely-worked stone implements. In 1935 the Valley of Fire became the first of Nevada's State Parks. Today its Visitor Center provides exhibits that describe the geology, ecology, prehistoric cultures and history of the park and its nearby regions.

The Valley of Fire stands naked, devoid of people; its land and plants fragile, vulnerable to disturbance. To the north of Lake Mead, east of Las Vegas, in the southern part of the state, it humbles, then it inspires. Bounded by the Muddy Mountains and Moapa Valley, the awesome clusters of rock demand respect. Its drama is silent, its aura mystery, its experience sensory. With the help of the people this sacred, silent, and flawlessly beautiful place will remain untouched and unspoiled. □

# Beneath Desert Sands

## Geothermal sources could be Nevada's answer to the energy problem. By Guy Shipler

The fact that the needle points to "empty" on the energy gauge is just another challenge to Mr. Joe Average; he's been through this kind of scene too many times to get excited. It's like the reserve built into the gasoline tank of his car. He knows that there are always a couple of extra gallons to assure his getting to the next town. And in spite of the shortage awhile back, he also knows that right now he can get all the gas he wants at that town — or anywhere — even though it keeps costing him more.

So Joe Average stays cool. He figures that the incredibly sophisticated and complex Big Machine that runs America is like his car: It won't sputter to a halt, no matter what the energy gauge reads, or how loud the warning cries of the doomsayers. Somehow, somewhere, some new source of energy will turn up. The talent and ingenuity of American science and industry has always produced when the chips were down, haven't they? As long as the lights still go on at the flick of a switch, and the service stations still have gasoline, Joe is confident that the chips are a long way from being down this time around.

In theory, his confidence is well-based. It's common knowledge that the most fundamental elements of the universe are abundant sources of natural energy. And yet they are virtually untapped. Even when we exhaust those limited resources such as oil and coal, there will be inexhaustible supplies of energy from the wind, nuclear energy, the heat of the earth — the sun itself.

But in practice, this reasoning contains a dangerous catch. Only recently have we begun to try to harness these awesome elements, to channel their seemingly infinite forces into usable tools for man. It's a long and complex trip from oil well to gasoline tank, even though the means to make that trip have been honed to a fine degree of efficiency. It's a much longer and far more complex journey from the atom, the sun, the wind, and the earth's interior heat to a comparably widespread power source, because the means for making that transition do not yet exist.

To be sure, science and industry do have the ability to make that transition. But as impressive as modern man's technological expertise may be, the authorities tell us that only a crash research, development and production program on the scale of our World War II industrial performance can bring these alternate energy sources into usable form within the next decade or two. So far, no such program has come close to that magnitude.

Ironically, it is the primitive areas of Nevada which could be primary sites for the development of any or all of these future energy resources. Its geography is ideal: high desert country basking virtually untouched in brilliant sunshine and clear air; an atmosphere and land as elemental as the ancient equally untouched energy sources which are a part of their very being.

It was because of such characteristics that the federal government long ago chose Nevada as the location of its test site. On it, an area as big as the State of Rhode Island, scientists have sought to unlock the secrets of the atom for sophisticated peaceful use. The unique Desert Research Institute, a part of the University of Nevada System, is in the vanguard of experiments with solar energy, which many scientists now believe is the ultimate answer to our problems. Other technicians in the state are already turning their attention to the winds which race and roar unchecked by man-made structures across the deserts.

But Nevada holds a potentially higher card in the alternate energy game: the heat of the earth itself.

On a national scale, Nevada's geothermal potential is second only to California's, with about 20% of its 110,000 square mile area believed to have the earth's tremendous heat near enough to the surface to use the boiling water and steam to drive electric generators. And barring red tape and other legal hangups, it could probably be developed far more quickly than energy from some of the other alternate elements, partly because less complex and sophisticated equipment is needed to produce power from geothermal than from other sources. Moreover, it has several other big advantages over other alternate energy sources.

Norman W Melvin, geothermal coordinator of the Bureau of Land Management, points out that the first advantage is both ecological and practical:

"The development of this particular type of resource uses up as little land area as any other form of energy we have All you have to do to get to the source is drill a hole in the ground. You don't need a refinery, as with oil, as the steam or water goes right into the power plant. It's like having a power plant operating right on top of a coal bed and the coal comes right out of the mine and jumps into the fire. But even if it could function that directly, a coal mine takes larger and larger slices of land. This doesn't."

The main environmental detriment is the power plant itself, and the noise that comes from a geothermal operation. Since the only products are hot water and steam, pollution is non-existent.

And there's even an almost perfect safety factor: If there were a blowup, there would be no fire: The only immediate danger is one of scalding by steam. There is no disposal problem as with nuclear energy.

"The product of the geothermal system," says Melvin, "is water. And any good water can be extremely valuable in Nevada, which is so short of it."

Even though much of the hot water that comes out of the earth is impure, the geothermal process distills it. Enough impurities are removed to make the water usable for cattle or irrigation. If the amount of water is too limited for that, it can be pumped back into the ground,



reheated and turned into steam again, repeating over and over again its power-generating task.

Thus: A renewable resource. Given proper care and production rates, Melvin says, "This field is essentially infinite. If the water can be heated fast enough, you can keep going indefinitely." This is more than theory: The first geothermal area to produce electrical energy was at Lardarello, Italy, almost 70 years ago. It is still operating, with no sign of deterioration.

But the geothermal picture is not all sweetness and light. Although the earth's heat is simply there, available for the taking, it does not come free. There are quite a few problems involved, all of which add up to dollars.

For one thing, a good many geothermal areas — especially in Nevada — are on public domain. They are leased by private companies under terms which include royalties to the federal government. Privately owned ground with geothermal resources can be purchased and companies can thus avoid continuing payments. But in both cases, large funds are involved. And once the plants start operation, maintenance costs run high because of corrosion of pipework and formation of scale within the pipelines.

But the toughest and most expensive undertaking comes right at the start — the cost of testing a given geothermal area to learn if it can be developed to generate energy. This process is comparable to finding an ore body large enough and rich enough to be worth mining. And, like mineral exploration or drilling for oil, the results can be negative. If such a fate is to be avoided, three key factors must come together reasonably well to make a geothermal site usable as a power generating source: temperature of the steam or water; volume of water available; and the kind and quantity of minerals dissolved in the water. According to the state engineer of Nevada, all of these elements vary widely in different geothermal areas. Testing involves the drilling of several wells and measuring their average temperature and flow for several months before the engineers can get a fix on the area's capability. (Generally, water that runs at 400°F or more is preferred because it will "flash", or become steam when it is brought to the surface.)

What makes the testing so elaborate is the extremely uneven nature of the earth's core in relation to its surface. Temperatures reach an estimated 9000°F in the deep interior of the planet, and as much as 900°F only a few miles below the earth's surface. The outermost crustal rocks effectively insulate these temperatures so the heat usually escapes from the earth's interior very slowly. (The most spectacular kind of escape occurs when molten, glowing lava spews out of volcanoes and flows along the ground.) The slow conduction of the heat through the rocks creates hot spots in the crust presumably because magma, or molten rock, has been squeezed upward until it is only a few miles from the surface. The intense heat raises temperatures and pressures of water in the vicinity to a point where it bursts through the surface, causing geysers.

The hot spots vary greatly in depth, intensity, size — and general location. Apparently they proliferate in the West, according to one widely accepted theory, because the area is geologically newer than other parts of the U.S. But whatever the reason, the U.S. Geological Sur-



Bardwell photo

vey has located and identified many of what it calls "Known Geothermal Resource Areas" (KGRA) throughout the West. It has found 14 in California, 13 in Nevada, seven in Oregon and no more than two in each of the other western states. There are a total of 13.5-million acres of such areas in Nevada. At least 250 hot springs bubble in most areas of the state except in southern Nye and Lincoln counties (which also have few metal deposits). According to a state engineer's report the west central and north central parts of Nevada have "higher hot-spring temperatures and greater than normal heat flow through the rocks, and consequently are considered to have special potential for electric energy generation."

But progress in geothermal work still lags as it does in the other major alternate energy plans. Norman Melvin estimates that there will only be from three to five power plants operating in Nevada within 15 years, at present development rates. He believes that this time could be shortened dramatically, however, if the oil situation deteriorates further, and, especially, if its price continues to climb. "There's no incentive now for the big companies to go full speed ahead on geothermal development," says Melvin. "But if the Arabs move the price higher and higher, if they continue to squeeze, the geothermal situation becomes extremely attractive economically. We'll see some real action then."

Where in Nevada are the geothermal power developments most likely to take place?

"I'll go out on a limb," predicts Melvin, "and say that the first major development will be at Beowawe. There are several reasons. The area is power-short. Arteries of transportation are already in place – a railroad, highway and airport are all nearby. There are operating mines in the area. Already, a coal-fired generating plant is going at Valmy. And the resource itself may be the best in the state.

"But there has not been enough exploration to make sure that this is as good as it looks. The key is whether there is enough underground hot water available. Several test holes have been drilled by various companies but more are needed. Several of the holes are about 600 or 700 feet, one is about 2,000, a couple more are 10,000. These show promise. They are deep, and they are hot. But we still need to know more." That's one reason this "free" energy source is so costly.

It is not clear when the companies who have done such exploring in the state will come in to start working in earnest. Here again, it's a matter of economics and need, of how heavy the energy crunch gets.

Melvin figures that next to Beowawe, we can probably figure on a dozen other good potential areas. Among the better prospects are Barrows Hot Springs near Tonopah; Steamboat Springs near Reno (although there is a lot of scaling and not much water there); the Fort Churchill area; Clan Alpine in central Nevada; and "probably Brady Hot Springs and Hazen."

Despite its drawbacks, including the time and money needed to determine quality, the geothermal resource has many pluses. On the energy front, a good source can provide almost endless power – note that there are geysers in California which produce 500 megawatts of electricity, half of what is needed for a city the size of San Francisco. A less publicized but extremely important advantage is the use of geothermal steam and water for other uses, including direct heating and cooling of buildings. Hot water from underground sources heats every building in Reykjavik, Iceland, operates some industry there, and keeps ice away from a dredge so it can work all winter. Geothermal heat is excellent for high-yield crops; New Zealand uses it to raise orchids year round. In this country, houses in such scattered areas as Boise, Idaho; Klamath Falls, Oregon; and even in parts of Reno, are heated by natural heat from the earth. And in many areas of Nevada the hot water is used to advantage for agriculture and industry.

But the basic reason for Nevada's pursuing this energy source comes down to our own economic needs. "Nevada's interest is far more than academic," says the state engineer's report. "Electric energy use in Nevada is expected to reach over 12-million megawatt hours annually by 1980, nearly double present consumption. The relatively high cost of producing electric energy in Nevada by conventional means inspires serious consideration of geothermal energy sources."

Kelley Jackson of the Nevada Public Service Commission echoes this warning: "In an organization sense, the state really must review its activities during the next two years and come up with a better delineation of our responsibility before the next session of the legislature. Energy is obviously going to be an ongoing problem over the next 15 or 20 years, and being primarily a consumer state, now we're going to have to look at conservation and methods of determining how we can get enough energy supplies to meet our projected growth demands.

"That, I think, will be one of the biggest challenges for this state. It's incumbent upon us to get involved at once."

The geothermal resource may offer us the fastest way to meet that challenge. □

Then & Now

# Agriculture

## To till the dust, the rock, the peaks — what seemed impossible was overcome. By Julian Stone

There are places in Nevada that look as if the sagebrush is aching, where tumbleweed rolls across patches of gravel and sand while driven by a scorching wind. There are places in Nevada where gila monsters, diamondbacks, tarantulas and scorpions revel in the sun and dust and rock, sometimes fighting for a landscape so barren that it is devoid of human habitation.

But then again, there are certain wide, green and yellow valleys that are lush with crops.

Nevada's 109,889 square miles of high desert country are made up of alkali wastes, grazing land and arable valleys. Crops grown in the valleys include wheat, potatoes, asparagus, barley, melons, cotton and an annual production of over fifty million dollars worth of hay.

In the spring of 1851 Colonel John Reese and 17 men were sent by Brigham Young from Salt Lake City to the part of Utah Territory now known as Nevada. They brought seed and grain and livestock to the foot of the Sierra, built an irrigation canal and plowed for crops. A year later the barley, wheat, turnips and watermelons that grew from their labors were sold to immigrants passing through to the promises of California.

The discovery of gold near Dayton, and the later unearthing of vast amounts of silver in Virginia City, brought forth many prospectors and entrepreneurs and a profitable market for beef. During the very dry winter of 1862 California ranchers drove their cattle across the Sierra into Nevada to feed. Many of these cattle were left behind to become the foundation of the mighty herds that later roamed the unfenced land and supplied the many flourishing mining camps.

At the end of the Sixties, sheep were driven in from the Midwest and Idaho. More cattle arrived from Texas, and the Nevada livestock industry expanded rapidly. Average annual precipitation varies from two to 15 inches, length of growing season lasts from 150 to 300 days, so livestock and forage production became Nevada's basic agriculture.

Even though the state was once covered with a wide variety of palatable grasses, the desert rangeland depends on a fragile balance. It took only 40 years of range abuse to destroy the natural vegetation. Tramp sheep outfits exploited Nevada's open range with no thought for the future. In 1908 Nevada ranges were burdened by 400,000 head of cattle and more than a million sheep. It was evident that more than meat was needed for the people and livestock of the state. Control was necessary; hay production became imperative.

Nevada's arid land was not quite waterless despite its dry surface. With 254 separate valleys edged by mountains rising up to 13,145 feet, 70% of the precipitation fell on the peaks as snow which later flowed to waste. This resource could be channeled for agricultural use. The Federal Reclamation Act, passed in 1902, focused attention on America's desert lands; irrigated acreage soon increased.

The Newlands Project, first of several Nevada irrigation plans, was aimed at changing the sagebrush flats around the Fallon area of Churchill County into a farmer's dream. A canal was begun in 1903 to divert Truckee and Carson River water which would be held at Lake Lahontan Dam and Reservoir, finally completed in 1915. (During the same period, a dam was built at Tahoe City to raise Lake Tahoe six feet and to supply power and to hold additional irrigation water.)










*Truckers bring up to 200 loads of potatoes a day to Winnemucca.*



*A Basque sheep herder (top) tends his flock in Elko County.*

*Leonard Joy (Dept. of Agriculture) checks a trap for pink boll worm.*

*Cotton boll, a little before perfection at Pahrump.*



Rye Patch Reservoir was begun in 1936 to retain Humboldt River water to irrigate the valley at Lovelock. The year before, Boulder Dam (now known as Hoover) was completed and multi-use Lake Mead held back Colorado River water to irrigate parts of Arizona, California, Nevada and Mexico. Hoover Dam also supplied hydroelectric power to Las Vegas and a wide area of the Southwest.

Fallon's soil held too many minerals for farming, but it could be leached with water to rinse the salts through the earth. The area was level and easily farmed and quickly became an important livestock and hay producing area. Today the land around Fallon has 250 beef ranches, 32 dairymen, several large feedlots (the Nevada Cattle Company alone holds up to 12,000 head), and 326 farmers growing corn for sileage, alfalfa, hay, "Hearts of Gold" cantaloupe and other field crops. Some watermelons grown in the area have weighed up to 50 pounds.

Each Nevada valley has its own characteristics of climate and moisture. Smith and Mason Valleys in Lyon County are the most fertile in the state, and the south's Muddy River Valley has a nine-month growing season where farmers can cut up to six crops of hay. In Clover Valley, Elko County, where 15 inches of moisture is normal, temperatures vary from −20°F to highs in the 90s; in Pahrump Valley, Clark County, two inches of rain is normal, there is seldom frost, growing season is longer with summer temperatures that can soar to 115 degrees.

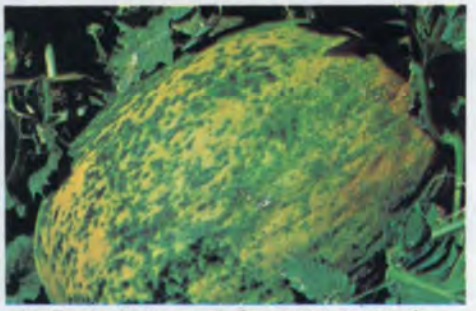
Walt Brinkerhoff moved to Lovelock in 1944. He came from a family of Utah seed farmers and he tried seed crops again in Lovelock's valley, which is considered – because of Rye Patch Reservoir – to be one of the richest agricultural sections of Nevada. The black, humus-laden soil is the accumulation of silt from

Hadley photos



Over $50 million worth of hay is grown in Nevada each year; this is Smith Valley.





McDougal Livestock Co. grows most of its own feed. Its lot in Lovelock (top) can handle up to 15,000 head of cattle.

Yellow rind, sweet flesh, the casaba melon.

ages of Humboldt River flow. "Years ago it was quite hard to get into the alfalfa seed business because irrigation is critical and you had no pollinators," Brinkerhoff says. "Sometimes honey bees will work but most of the time they won't as they don't like the pollen from the alfalfa blossom.

"When we first started here, we had alkali bees which live in the ground. They worked pretty well for us for three years until we used the wrong kind of insecticide and killed them all off. After that we grew more grain, raised some seed, but the seed didn't yield too good. This went on until we discovered the leafcutter bees. We encouraged them by drilling holes in all the logs and boards we could find so they could lay their eggs in the holes." Brinkerhoff now uses thousands of soda straws to house his bees, a discovery that was made 20 years ago by his young son Val. Other seed farmers soon followed suit.

"Alfalfa seed is a high-risk crop, a bad frost could wipe you out," says Alan List, another seed farmer in Lovelock Valley. "If everything works just right, however, it's a bigger money crop than hay or grain. Our seed brought more than a dollar a pound last year but the price is less than half that this year." Average yield per acre in the Lovelock area is from 450 to 500 pounds. List says there's potential to raise a thousand pounds per acre if everything works just right.

Alfalfa seed is Lovelock's biggest crop; hay for feed is second; there is also a large feedlot on the edge of town. There is a plant in town that, for 4 cents per pound, cleans, bags and ships alfalfa seed. Walt Brinkerhoff sold a million pounds of seed in 1975 which was 20% of Lovelock's and 1% of the nation's total crop.

Today, 86.5% of the land in the state is federal public domain, most with little water and leased to ranchers by the Bureau of Land Management for grazing livestock on a permit basis. Nine million acres are privately owned and used for livestock and crops. Presently 825,000 acres are in irrigated farmland using water channeled from reservoirs or pumped from wells using subterranean water. More than half of that artificially watered land is used for growing 900,000 tons of alfalfa and other types of hay to winter feed the cattle. A large percentage of Nevada's hay is sold in California.

The Nevada Division of Water Resources issues water permits for drilling wells to ranchers and farmers, but only in amounts the water can be recharged. "Before we issue permits we look at all the information available," explains Roland Westergard, State Engineer and head of DWR. "We try to issue only what the water basins will handle, because we don't want to go to a farmer in 5, 10, or 15 years and turn the pumps off.

"We haven't issued any permits for a long time in some valleys," he adds, "but we keep a record of water level and check or restrict how much water is being pumped. We constantly monitor the effects on underground water at new developments. We measure wells several times a year, and in some areas we might measure monthly, or even weekly as in Las Vegas Valley."

The Division of Water Resources has to know how much water is available and how long it will last. For each of the state's valleys, the Division has a written report which is available to the public. "In some of the big desert valleys – like in Railroad and Big Smoky Valleys – there is water that has not been tapped to the ultimate yet. On the other hand, many of the valleys are restricted for permits as in the Dutch Flat area north of Winnemucca, the lower end of Paradise Valley, Quinn River Valley, Dayton, Las Vegas and Pahrump."

(Continued on page 48)

# Nevada Potpourri

## By Connie Emerson

To Winnemucca, McGill, Austin, Goldfield – to the here today-gone tomorrow mining camps, into the green river valleys and to the lonely hills came the settlers and the adventurers, the solid rocks and the rolling stones from other lands. Many of their names can be found in Nevada history books. They became the prominent business figures, judges, senators, a governor. Some of them were transitory shadows, without identity. No one knew – or seemed to care – who they were, and in accounts of their deaths they were referred to merely as a Mexican, an inoffensive old Irishman, a Swede. As for the rest, after providing a good share of the muscle and skill necessary to build Nevada, many of them migrated again to new bonanzas and greener pastures. Others stayed and raised families, determined that the children should benefit from the opportunities to be had in their adopted country.

But whether they were important or unknown, whether they stayed or moved on, they became a part of Nevada.

For many years the Washoe, Shoshone and Paiute Indians had moved freely through the land, forced by the scarcity of food to be nomadic. They hunted deer, antelope, mountain sheep and smaller animals. They fished in the streams, gathered roots, pinenuts and berries. Though Spanish explorers, American survey parties and trappers passed through their hunting grounds, the lands were so vast that it was not difficult for the Indians to avoid the white man. When wagon trains started rolling west through the Humboldt Valley, the natives simply retreated to the mountains while the strangers were in the territory, occasionally sending a party of braves down to bring back a horse or cow for food. Even when a few gold miners arrived and the first settlers came, the Indians' life-style was not threatened.

Then one day in 1859 two Irishmen, Peter O'Riley and Patrick McLaughlin, discovered the Comstock Lode and within a few months the Indians ceased to be Nevada's numerically dominant race. The big bonanza brought thousands of people from other parts of the nation and almost as many from other countries of the world.



**Immigrants came to seek their fortunes; their influence remains an elusive part of today's Nevada.**

By 1870, almost half of Nevada's people spoke with a foreign accent when 44.2% of the state's population was immigrant. As late as 1910, one quarter of the people living in the state were foreign born.

On Virginia City's C Street during the Comstock days there were saloon keepers, fruiterers and rooming house proprietors from Yugoslavia (referred to as Austrians in the census and as Slovonians by the newspapers and their fellow townspeople). There were other shopkeepers who had migrated from Germany and France. A barber came from Portugal and the watchmaker was Swiss. There were Italian charcoal burners, French-Canadian woodcutters, pigtailed Chinese selling produce. The miners themselves came from more than a score of countries (including England, Ireland, Scotland, Sweden, Denmark, Russia, Wales and Mexico), and at one point 73% of the area's male work force had been born overseas.

Two years after Reno was established in 1868, its residents included a blacksmith from Australia, an Arabian jobber and a woman from the West Indies whose occupation was noted in the census enumerations as "keeping house."

Among the first groups to arrive were 50 Chinese who were brought from California by the Mormons four years before the Comstock discovery. Their job was to dig a ditch to divert Carson River waters to Gold Canyon for use in placer mining. Thousands more of the "Celestials" (estimates range as high as 30,000) were brought to the United States as indentured servants to help build the Central Pacific Railroad. When that six-year project was completed in 1869 many of them went to Nevada mining camps and towns to find work. Some even became sheepherders. By 1880, Orientals constituted 8.7% of the state's population.

Everything about the Chinese – their customs, clothes, language, even their music – seemed strange. But more disturbing than anything else was their willingness to work for lower wages than the other miners. The result was discrimina-

tion more severe than that faced by any other immigrant group in Nevada. Not allowed to vote or to testify in court, they were permitted to placer mine only on land which caucasians had previously mined and abandoned. Later, in many areas, labor unions established regulations which prohibited Chinese from mining altogether. Signs proclaiming "No Chinaman shall be allowed to hold a claim in this district" were not uncommon. The Chinese were permitted to perform menial labor, operate restaurants, sell produce and do laundry. It was in this latter capacity, as laundrymen, that they did some "mining" despite the regulations. After they had washed the miners' clothes, the enterprising Orientals drained off the water and picked out bits of gold with tweezers. There were 5,416 Chinese in Nevada in 1880. By 1970, that figure had declined to 430.

Like the Chinese, most of the large group of Italians who migrated to Nevada in the 1870's came under contract labor agreements. *Padroni* the Italian middlemen, usually paid the immigrants' transportation to the United States and often provided food and lodging for the workers. In return, the immigrants signed contracts to work at a fixed wage for from one to seven years. The *padroni* pocketed the difference between the money paid by the employers and the money paid to the immigrant workers.

Most of the Italians who came to Nevada under the *padrone* system fully intended to go back home someday – at least to die. A large number of them lived in the mountains and hills of Eureka County, in stone huts, planked shacks, log cabins or tents. They cut wood from mature pinenut trees, then burned it slowly at a regulated rate to make charcoal to fire the smelters. When pinon wood was not available, the charcoal burners had to substitute black mahogany or juniper, which required a higher burning temperature, which in turn required the construction of beehive shaped slate stone ovens. Life for the *carbonari* was difficult; they received as little as 14 cents a bushel for making and sacking the charcoal as well as loading it onto delivery wagons. Nonetheless, of the 840 Italians living in Eureka County in 1880, at least 594 of them earned their living as charcoal burners. Other Italians migrated to the western counties where they became involved in mining, dairying and agriculture. Despite their vows to go back to the old country, many of the Italian immigrants stayed in Nevada and others followed. In 1970, over 7½% of the state's foreign-born had come from Italy.

Immigrants from the British Isles made up by far the largest foreign-born group on the Comstock and throughout the state, even though the Scots, Irish, Welsh and English definitely preferred their own countrymen for company, and only in times of controversy or confrontation with members of a non-Anglo Saxon group would the British band together. Each had its own gathering place in a clubhouse, cafe or saloon.



In Virginia City there was an English choral society. The Scots organized a bagpipe band and their Caledonian Society celebrated the birthdays of Robert Burns and Walter Scott and each August held a gathering of the clans. The Irish, in addition to having their own band, formed the Fenian Society and Ancient Order of Hibernians. Occupationally, the people from the British Isles were a diverse lot. Their members could be found in every profession from medicine to banking to prostitution. They were politicians, peddlers and priests; mine superintendents and dishwashers.

Germans passed through Nevada as members of the Jedediah Smith expedition and other early exploring parties. Several pioneers in the Donner Party had originally migrated from Germany, too, but it was not until 1855 that the first German settlers came to farm in the Carson City area. Later arrivals went to other parts of the state as well, but the largest concentration of German immigrants settled in Douglas County where most of them engaged in agriculture. In 1900, 16% of Douglas County's population was German born. By and large, the Germans enjoyed greater prosperity than any other immigrant group, tending to be less transient.

The first Nevada Yugoslavs came from their native land via California and most worked as merchants. Between 1860 and 1885, 40 south Slavs had businesses on C Street in Virginia City, the state's main population center at that time. Several of these businessmen later followed various mining booms and moved their operations to other parts of the state. Another group of Slavs were among the 30,000 people who arrived in White Pine County as a result of the short-lived 1868-69 silver boom.

Shortly after 1900 the second wave of Slavs arrived. They differed from the first immigrants in that many of them came directly to Nevada from overseas, there were more of them, they were predominantly miners and they formed sizable ethnic communities in both Nye and White Pine counties where their native language was spoken and Slavic culture was maintained.

Around 1880 the Basques started leaving their homes and families in the Pyrenees to tend Nevada sheep. Some of them returned to the old country; others took their wages in sheep rather than money and built their own flocks. They sent back to Spain and France for their sweethearts, brothers, sisters and cousins. Some of the Basques became hotelkeepers and their establishments' family-style restaurants became meeting places renowned for superlative, abundant food. The Basques, perhaps better than any other group, were able to retain strong ethnic traditions while becoming good, proud American citizens.

Sizable numbers of immigrants from other countries came to Nevada, too. The first claims in the Columbia Mining District in Esmeralda County were made in 1864 by Mexicans, and throughout the state the experienced Mexican miners were in great demand for working silver properties. And aside from the miners there were Scandinavian teamsters, French milliners, dancing masters and parlormaids, Czechs, Poles and Hungarians.

Old country customs blended with the ways of the frontier society. Immigrants came, and their presence made the state cosmopolitan far beyond its size; sophisticated far beyond its years. □

Then & Now

# Transportation

## Scorched by heat, blasted by furious winds, Nevada never was an easy place to travel. By Mary Matrille

The rugged trails that scarred Nevada during its territorial days were made by a million feet. Immigrants horses, mules, oxen and cattle plodded along, while wagons, heavy with the stuff of which dreams are made, pressed into the earth and cut grooves for others who followed in their wake.

Driven by complex emotions, they passed through on the Overland and the Old Spanish Trail only to be scorched by the heat that shimmered up from the alkali flats, and blasted by the zephyrs that ripped through the mountain passes. But the elements didn't stop them and neither did the Indians who fought a losing battle to hold the land that was virgin territory to the white man. Wagon trains passed innumerable wooden crosses like the one near Gravelly Ford (Beowawe) where Lucinda Duncan, a frail teenage girl, was left to rest. "The Maiden's Grave" is a symbol of the toll the Nevada trails claimed. Even the story of the Donner Party which lost 40 of its 87 members didn't stem the flow.

It's no wonder that until the news of the Comstock Lode attracted scores of potential millionaires, the territory was thought of as a purgatory to be endured in order to reach the promised land of California. The news of the silver strikes brought people to Nevada faster than the growing towns could handle. In those days when supplies were short, Virginia City and other mining towns owed their survival to the teamsters who brought in the necessities like liquor, food and lumber, and took out the ore which paid for them. Those hard-drinking, hard-driving, dust-eating, tobacco-chewing drivers cracked their whips over the heads of their 20-mule teams that carried the tons of freight that made the territory rich.



Supplies weren't the only thing the miners and settlers craved. Mail was also a precious commodity, for service in those days was virtually non-existent in the West. The U.S. Post Office ran up a huge yearly deficit trying to get the mail to the Pacific Coast and a harsh statement was issued from Washington. "Until a railroad shall have been constructed across the continent, the conveyance of the Pacific mails overland must be regarded as wholly impractical."

The Pony Express offered an heroic but brief solution to this problem. Covering 250 miles a day, Pony Express riders were the fastest things going. Their pouches, filled with letters and documents written on the thinnest possible paper, were worth their weight in gold, and probably cost the company double that to send. The venture was a race from start to finish. The riders outran Indians, robbers and creditors but they couldn't outrun the telegraph wires. Western Union put an end to the Pony Express after a glorious sixteen months.

Modes of transportation changed rapidly but improved slowly. When the Wells Fargo and Overland stages wheeled across Nevada, the prospect of spending a few days or weeks on a bumpy spine-bending trip was made intolerable if even one of the nine passengers who could be crammed into a Concord coach was an ounce overweight. Passengers who felt the need for liquor to numb their aching bodies could circumvent objections by sharing bottles with their fellow travelers. This strategy worked just fine as long as the driver didn't participate. After a round or two of the communal bottle, a nap was in order, but sleeping on a stagecoach was an art that took practice and dexterity. More than one hapless passenger was awakened with a start when he landed in someone's lap.

Westerners were in a hurry, and when speed was of the essence, Hank Monk, Nevada's legendary stage driver, usually got the fare. Once Hank had a passenger who was in a hurry to get to his wedding. In the haste of getting ready, one of the horses got his blinders on crooked and pranced along at such a rate the others were startled into a run. The bridegroom, frightened out of his wits, didn't heed the stageline's warning to stay calm and in his seat (as if that were possible) and jumped out of the coach, landing in the middle of a puddle. Hank couldn't stop to retrieve his charge, so another conveyance was found and a wetter but wiser man walked down the aisle.

In 1862, President Lincoln signed the Pacific Railroad Act and the transcontinental railroad was born. Over 20,000 laborers laid nearly 2,000 miles of track, and on May 10, 1869, the rails which met at Promontory, Utah, were officially spiked in gold and silver. Nevadans contributed more than the silver spike to get the tracks over the mountains and deserts, but it was worth the sweat to be linked with the nation.

Each new bonanza drew the rails like a magnet. The Virginia and Truckee Railroad ran from the Comstock to Reno where it connected with the transcontinental. Its 52 miles of track were described by newspaperman Dan De Quille as, "Undoubtedly the crookedest road in the

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United States – probably the world." He further explained, "As will be seen by the distance from Virginia City to Reno in a direct line, the traveler not only swings 17 times round the circle in going from Virginia to Carson, but has almost completed a grand circle when he reaches the end of the road and connects with the Central Pacific." Who knows how many miners were maligned for drunkenness when all they did was take a ride on the V&T

Many railroads financed their ventures by selling the land the government had granted them along the routes. Imaginative promoters offered immigrants a package deal, where for one price they could pay the fare and get a piece of land at the end of the line. When the public fell for the scheme, special immigrant cars were added for the takers.

Central Pacific's No. 6 could have won an award for the most miserable means of transportation in America. Its cars were equipped with wooden seats with no springs, a watercloset that defied description, and windows through which dust, rain and snow blew. The trip through Nevada was reputed to be the worst part of the journey. During the summer, the heat and the smell were

*Trolleys moved on Reno streets (left) from 1904 to 1927, then folded because of financial problems.*

*The end of the line at Cisco in 1867; the Wells Fargo Stage Line continued east to Salt Lake City.*

# Riding with the Great Hank Monk

*EDITOR'S NOTE: In 1909 Idah Meacham Strobridge wrote of a trip taken in her youth when Abraham Lincoln was president and Hank Monk was becoming famous. The following account, in her own words, is taken from her book, The Land of Purple Shadows.*

It will not seem so wonderful to you of a younger generation, who know nothing of the glamour that hung about the heroes of that far time; but to those who lived in the old days, and who knew the old characters that belonged to the unspoiled West, it explains itself when I tell you that our own stage was to be driven by Hank Monk!

Hank Monk, the incomparable! The most daring – the most reckless of drivers; and the luckiest. The oddest, the drollest of all the whimsical characters who made western staging famous the world over.

In my mind's eye I see him now – his clumsy, awkward movements – his slow and bungling way of gathering up the reins, or reaching for the long-lashed whip. But, oh! the magic of his touch, as the horses answered the drawling "Gid-dap!" of the man whose master hand they instinctively gave their allegiance to. His fingers on the reins – a message went down the telegraph-line of leather, unread by us, which every horse understood as a wire operator understands the Morse code. They leaped forward into the snowy road in answer, while I drew a long breath of delight. I was riding behind six strong and splendid young horses that were driven by Hank Monk!

It was a dream come true! I am quite sure that had anyone asked me which of the two I would rather see – hear – speak to, Hank Monk or the President (and that meant Abraham Lincoln), it would have been the former I unhesitatingly would have chosen. Without doubt, my youthful judgment was biased, but the fact remains.

Fresh horses every twelve miles; and every horse "driven for all he was worth!" With the sharp air stinging our ears, and the big white flakes whirling into our faces, we awoke to the exhilaration of being carried onward to the heights of pines and firs, while Hank encouraged his galloping team with the most unique and amazing language ever used for such purpose.

Telegraph wires hung heavy; so coated with the frozen particles that – large as a ship's cable – they sagged from the poles; the buried poles themselves seeming to be great daggers driven hilt-deep into the bosom of the virgin snow.

The bells jangling their riotous music, the sleighs dashed through half a mile of white fog – a huge fog-bank that but made the cloudland scene the lovelier; for while a fog from the sea always seems to hide something that is dark and unlovely, a mountain fog in winter suggests a whole world of white and radiant objects. Through that enchanted fairyland, walled by the clouds and the snow, over the summit; past dark Tahoe (frozen and cold), out of the land of the pines, and tamaracks and firs, on, and still on we dashed; and so down the other slope of the mountain that looked into the Carson Valley.

Twice had the other stages gained upon us – twice had they passed; only to be, in turn, repassed by Hank and his matchless six. The snapping of the long lash cutting through the still air sounded like firecrackers on a Chinese New Year. He was putting big bays to the utmost test of their speed, and now we were racing in earnest. Down the eastern slope of the Sierra we flew as though flung by some giant force from the crest of the mountain.

(Continued on page 62)



suffocating, while in winter one pot-bellied stove threw off just enough heat to steam the windows. The guidebooks furnished by the railroads, masterpieces of understatement and exaggeration, scrupulously avoided saying much about Nevada.

After the turn of the century, transportation became more than a means of getting from one place to another. The prestige of owning an automobile was tantamount to riding with Hank Monk or driving the last spike at Promontory. Livery stables became garages and the smell of horses and hay was replaced by the odor of exhaust and gasoline.

The arrival of a 1904 Rambler caused the biggest commotion in Goldfield since Joe Gans fought Battling Nelson. The rather fragile horseless carriage wasn't suited for travel in Nevada. The rocky roads ruined the tires, potholes broke the axles, steep grades stripped the gears and the heat made the radiators erupt like miniature geysers. The hazards were so great that drivers never started out without enough tools and spare parts for a complete overhaul.

Despite the problems, auto companies were organized to haul passengers and freight across the desert. The Tonopah-Goldfield Auto Company and its successor, the Nevada Mobile Transit Company, soon chugged as far as Las Vegas and Rhyolite. These early taxis charged up to $25 per person for a ride but that didn't diminish the riders' enthusiasm; it just made them anxious for better roads.

Building good roads was a slow and expensive process. Races like the 1908 New York-to-Paris contest crossed the nation and Nevada and publicized the need for more and better highways. The federal government gave the state a little help when the bill for dollar-matching funds passed in 1916, and in 1925, Nevadans passed their own legislation, the Transcontinental Highway Exposition Bill. The bill, designed to draw national attention to the highways being completed in the state, set the exposition date for the following year. Reno was ready, but embarrassingly enough, the roads weren't, so the extravaganza was postponed until 1927

November 24, 1904, marked the official opening of the trolley line in Reno. Reno Traction took over the lines in 1906, and built an extensive service. Schedules became more complex as the tracks reached out from the city, and despite their popularity the trolleys were difficult to operate and financially disappointing. In 1927, Reno Traction abandoned its service and the trolleys clanged no more.

The mails once again brought a dramatic first to Nevada. In 1920, the inauguration of a coast to coast air mail service brought Eddie Rickenbacker to Reno to publicize the effort to get the mail off the ground. A year later, a day and night service brought the news faster than ever and 1927 marked the year when Boeing Airplane and Eddie Hubbard got the Chicago to San Francisco contract and made Blair Field in Reno one of the stops. Three years later, United Airlines moved the airport to a larger area and added flight attendants to the passenger flights at Hubbard Field.

Reno wasn't the only city where the planes touched down. Walter Varney was awarded the contract to fly the mail from Pasco, Washington to Elko, Nevada in 1925. Las Vegas began its air service when Western Airlines landed its planes on a sagebrush strip in 1926. By 1941, Western had started a regular service at McCarren Field.

The "City of San Francisco," the first streamliner, was the forerunner of the gamblers' specials that bring millions of tourists in air-conditioned comfort to pit their luck against far different odds than those faced by travelers on the immigrant specials. Nevada's difficult terrain has been conquered by an excellent highway system, and modern car travel is a pleasure. Truckers, the new teamsters, cannonball across the state carrying goods for which Nevada's free ports provide tax-free storage. Major airlines serve Reno and Las Vegas. Commercial flights are also available to and from Carson City, Elko, Ely, Winnemucca and Tahoe.

With 110,540 square miles of high desert country and little more than half a million residents, transportation remains the key to Nevada's future growth. □





# LAS VEGAS

From the opening of your morning drapes to the closing of the stage curtains at night, Las Vegas offers every convention couple a unique combination of business and relaxation. Despite the romantic atmosphere, Convention Center meetings attract record attendance while exhibitors make more sales. Get all the details about Las Vegas conventions by writing for your free color brochure (the most lavish convention brochure offered anywhere): Director of Sales, Las Vegas Convention Bureau, Post Office Box 14006, Las Vegas, Nevada.

# Make a State Seal Needlepoint

The Great Seal of the State of Nevada has been done in leather, crewel embroidery, paint and probably a dozen other mediums. It has adorned wallets, briefcases, chairs, walls and Nevada state cars. Officially it is used on documents issued by the Secretary of State.

Nevada's seal, provided for by the legislature in 1866, was preceded by a Territorial seal adopted in 1861 with the motto "Volems et Potens" (Willing and Able). This was replaced with "All for Our Country" on the

Reinheller photo



new seal which was surrounded by 36 stars to denote Nevada as the 36th state.

Its inner circle of mountains, a carload of ore to symbolize mining, a plow, sheaf and sickle (agriculture), railroad cars, telegraph line and a rising sun seem as appropriate today as they did then.

We bring the seal to readers in needlepoint and offer a pattern for the home craftsman. Designed by Connie Emerson of Reno, the pattern calls for a 15″ square of mesh, the circle being 13½″ and includes full instructions along with suggested colors.

It's a great gift idea and can be used as a pillow, a wall hanging, or any other decorating innovation which might strike your fancy. For your own pattern send $2.50 to Nevada Magazine, Capitol Complex, Carson City, Nevada, 89710. □







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| *Nevada Magazine*<br>*Capitol Complex, Carson City NV 89710*<br>*Please send _____ patterns for my State Seal Needlepoint @ $2.50 ea.*<br>*name*_____<br>*address*_____<br>*city*_____<br>*state*_____ *zip*_____ | *Please send a GIFT of the State Seal Needlepoint pattern to:*<br>*name*_____<br>*address*_____<br>*city*_____<br>*state*_____ *zip*_____ |

Then & Now

# Banking

From a tent in Virginia City to a two billion dollar business. Researched by Joe Midmore.

Dave Ward, agent, realized one 1859 day that bustling Virginia City had no bank. He promptly remedied the situation by adding the words "and Banking" to the sign on his tent office which read "Wells Fargo & Co., Express." Nevada's first bank was opened.

In the beginning banks sprang up, as did the towns themselves, in the areas where the richness of the ore brought prosperity, however temporary. Towns like Ashdown, Arabia, Cortez, Belmont, Tybo and Ione which are now only ghosts. Most of them were one town banks – the Henderson Banking Company in Elko; the Bank of Wells; the First National Bank of Ely; Quinn River Bank at McDermitt. Seven banks served Eureka at varying times and an equal number opened and closed in Carson City.

Most banks in the early years were locally owned and operated since neither the state nor federal government could see any wisdom in branch banking systems at that time. Some notable exceptions, however, were institutions started by George Nixon, John Paxton and John S. Cook.

Paxton, of the banking firm of Paxton and Thornburg, opened a Virginia City office about 1862. A year later he was in the Reese River country where a new mining camp was flourishing and he had opened Nevada's first branch bank in the town of Austin. The building he erected there was in continuous use as a bank for over a century and is now leased by Nevada National Bank to the city of Austin. (It now serves as a library.) Paxton went on to open banks in Hamilton and Eureka, the latter to become a branch of today's First National Bank of Nevada. Also in Austin in the 1860's there was a First National Bank of Nevada, but no relation to the bank which bears the name today.

John S. Cook set up a bank in Tonopah, then Goldfield and Rhyolite as those three towns began to pour forth millions in the first five years of the 20th century.

George S. Nixon, former railroad telegrapher, went into the banking business in 1886 when he and two




NEVADA HISTORICAL SOCIETY




*With 40 bars and three banks (which were open till midnight), Rawhide's boom lasted two years.*

partners organized the First National Bank of Winnemucca. Nixon was to parlay this bank into a chain of 15 institutions, a multi-million dollar fortune from the mines and a seat in the United States Senate. It was the same Nixon who was the victim of an infamous Butch Cassidy gang holdup in September 1900 in Winnemucca.

Reno's first bank came about when two brothers offered workers a check cashing service at $1 per check in 1868, before the town was established. In 1871 the firm became First National Bank of Reno and in the 1890's it was merged with Washoe County Bank. That bank was acquired by George Wingfield in 1929 and merged with the Scheeline Bank and Trust Company as the United Nevada Bank. Other banks which emerged in Reno were the Bank of Nevada and the Farmers and Merchants Bank. Under later leadership of Richard Kirman the Farmers and Merchants bank was reorganized. Kirman also organized banks in Sparks and Carson City.

Meanwhile, in 1905, with completion of the Union Pacific railway line across southern Nevada, the town of Las Vegas came into being. The Las Vegas Bank and Trust Company was formed by Los Angeles interests but withered and died within a year, apparently because of lack of support from the railroad.

John S. Park was brought in to run the First State Bank established by the railroad people and went into

business in a tent general store where a plank across two barrels served as his counter.

By the start of the 1930's Nevada had 31 banks in some two dozen towns. Four were in Reno, one in Sparks, a couple each in Elko and Ely and the rest scattered around the state. Twelve were owned by George Wingfield of Reno, the one-time Oregon cowboy who had joined with George Nixon in Tonopah and Goldfield to make a fortune from the mines. When Nixon died in 1912 Wingfield bought his banking interests.

By 1932 the Great Depression had taken a firm grip on the nation. Wingfield's banks had loaned heavily to the state's ranchers. A winter of abnormally light snow followed by one with disastrously heavy snows and low temperatures brought the ranchers to their knees and the Wingfield banks failed. Eight Nevada communities were left with no banks.

Among the most solid of the banks still operating was the Kirman bank in Reno – its name changed from Farmers and Merchants to First National Bank in Reno by a 1929 action of its board. In 1934 the bank was sold to Transamerica Corporation, holding company of the Bank of America. Continuing to expand, the bank had 11 branches by 1937 and then became known as First National Bank of Nevada.

In 1939 the end of the Depression was near. Two new banks were formed in Nevada in that year. In Reno a group of businessmen organized Security National Bank and in Elko the second new bank was Nevada Bank of Commerce which expanded within a decade to include branches in Pioche, Austin, Battle Mountain and Reno. In 1956 Ely and McGill branches were added with the merger of Ely National Bank. In 1968 the Nevada Bank of Commerce acquired a federal charter and changed its name to Nevada National Bank.

Security National Bank of Nevada now has 13 branches and total assets exceed $190 million; Nevada National's 24 branches have total assets of $215 million.

Las Vegas was growing fast in 1941 but its banking service was not keeping up. First National Bank of Nevada's branch there, the former First State Bank, was the only bank and FNB could not open new branches because of federal agency rulings charging a potential monopoly. This was overcome in 1945 when the Bank of Nevada was organized and was probably the only bank in history to open with a branch (at Henderson) before opening the main office in Las Vegas.

Valley Bank of Nevada, second only in the state to First National Bank, resulted after the merger of Bank of Las Vegas and Valley Bank of Reno in 1969. They now have 16 offices with total assets of $380 million. First National has 44 offices and $922 million in assets.

The other major banks are Nevada State Bank (with $95 million total assets) and Pioneer Citizens Bank ($56 million in assets). Smallest bank in the state is also the oldest still operating under the same name – First National Bank of Ely with $15 million in assets.

Nevada's banking in the early days was almost as unstable as its mining operations. Some banks closed almost as soon as they opened. Today, some 117 years after the opening of Nevada's tent bank in Virginia City, banking has risen along with Nevada's major industries and paralleled their successes. The state's banks today have 116 offices and total assets exceed two billion dollars. □




Hadley

*The headquarters in Reno for First National Bank of Nevada – one of the wealthiest banks in the country.*

## Tales of the days when Baldwin, Ely, Francis, Bryant and other bold airmen challenged the elements

# Barnstorming



### By Phillip I. Earl

Just north of Carson City lies a verdant meadow which was the site of an historic event on June 23, 1910, when a pilot named Ivy Baldwin proved that an airplane could fly in spite of a 4675 foot altitude. It was Nevada's first powered flight a little less than seven years after the Wright brothers made their famous first ascension.

Baldwin's flight had been arranged by a committee representing the promoters of Carson City's Sagebrush Carnival scheduled for July 3 through 5, 1910. Prior to the flight, all such exhibitions had been staged at or near sea level.

The pilot and his mechanics arrived by rail on June 18 with their crated Curtis Paulham biplane and the craft was assembled and ready for the first test flight two days later. Baldwin, however, became ill with food poisoning and further bad luck in the form of high winds delayed the trial until June 23.

The engine started with a chug and a puff as the rear-mounted propeller began to turn and reach full speed. The mechanics pushed the craft to the head of the make-shift runway, faced it into a slight breeze and set the chocks. Baldwin revved the engine, signaled for the chocks to be pulled, threw the speed clutch, roared down the runway and lifted off. He reached an altitude of 30 feet before leveling off and came in for a perfect landing about a quarter mile from his take-off point. He claimed that the steering mechanism was not working properly and ordered it repaired.

Following the installation of a metal steering crook, Baldwin made a second flight when he rose to 50 feet and glided half-a-mile before setting down. As he touched the field one wing struck a slight rise and a crossbar was crumpled.

Six more successful flights were made on June 25, but on the day of his scheduled flight over Carson City his machine refused to lift off. The large crowd on hand for the event went away disappointed and one editor was moved to comment that the ranchers of Carson Valley were talking of leasing the biplane to aid in the cutting of their alfalfa crop.

Exhibition barnstormers who followed Baldwin's flight have been completely ignored by history. The first of these was Fred Wiseman who staged an exhibition at Reno's fairgrounds in November 1910. Flying a Farman-type biplane equipped with an eight-cylinder, 100-horse-power engine, Wiseman's first attempt was made on the afternoon of November 5. He gained an altitude of only two or three feet. On the second try he did no better and the crowd soon started to thin out. The intrepid aviator gave it a third try but encountered turf and clods at the end of the short runway and stopped his machine before attempting a flight.

City crews labored through the night to lengthen the runway to 400 yards, but the next day was even more frustrating. Wiseman could not get up sufficient speed on his first run and he almost veered into the crowded grandstand on his abortive second try. On his third attempt, he threw the elevator just at the curve of the track and rose to 20 feet, only to have it snap as he made a left turn. The biplane went down hard, straddling the inside fence of the track with the broken elevator flapping in the breeze. Wiseman somehow remained in his seat and was not injured, but he was disturbed about the failure.

Repairs were made to both the biplane and the runway during the next 10 days and on November 16 Wiseman tried it again. On his first attempt, he rose to 25 feet before the wind gusted and forced him down but on a second try he was able to make several sweeps of the field.

The next day his luck was worse. Following a perfect take-off and ascension, he dived to pick up speed and was rising again near the grandstand when a sudden rush of wind caught the craft and seemed to throw it out of control. Wiseman fought with the stick, but as he came in he struck an irrigation ditch south of the track. The undercarriage crumpled, the left wing bent and snapped as it was dashed to the ground, the force of the impact throwing Wiseman forward into the wires and struts of his elevator. As a dozen or so men ran across the field, he extricated himself and walked away without looking back. The biplane was a total wreck and Wiseman and his crew gave up on any further attempts.

On Washoe County's 50th anniversary celebration in 1911 the famous barnstormer Eugene Ely appeared in Reno. Ely's most notable earlier accomplishment was a landing on and a take-off from the deck of the battleship Pennsylvania while it was docked in San Francisco Bay. City laborers cleared a 600-foot stretch of runway on the south bank of the Truckee River east of Virginia Street in late June and Ely's 60-horsepower Curtis biplane arrived on a Southern Pacific train on July 1.

Ely arrived July 4 by automobile, chatted briefly with his mechanics and then stepped to his machine, turned

his cap backwards, slipped on his goggles and took his seat. A moment later he stepped up the throttle and began to taxi down the runway, the engine rattling like a machine gun, the slip-stream churning up clods of dirt and clouds of dust as he picked up speed. The craft seemed unable to lift off, but at the last second Ely threw his elevator and slanted steeply upward, just missing a grove of apple trees. As the crowd cheered lustily, the machine rose to an altitude of 100 feet and peeled off to the southwest toward Mount Rose. Reaching the foothills, the craft swept north and came down the Truckee River before making a complete circle and swinging in above the trees for a perfect landing. Governor Tasker Oddie, who had previously declined to go along as a passenger, stepped forward to congratulate the flyer as hundreds of spectators milled around the plane.

In a later interview with Reno newsmen, Ely told of severe buffeting currents above the river and near the foothills. He also related that a grinding sound in his engine was the reason he cut short his flight. It was later determined that a cotter pin had worked loose and caused a bearing to be ground up. A few months later Eugene Ely died in a plane crash in the state of Georgia.

In June of 1912 Reno sponsored what was billed as the biggest aviation meet in the state's history. To be featured were Roy Francis and Frank Bryant, two California aviators who later formed one of the first acrobatic teams and were at that time pioneers in the new field of aerial photography. Both were flying instructors who were acting as agents for Silas Christopherson's flying school in Redwood City.

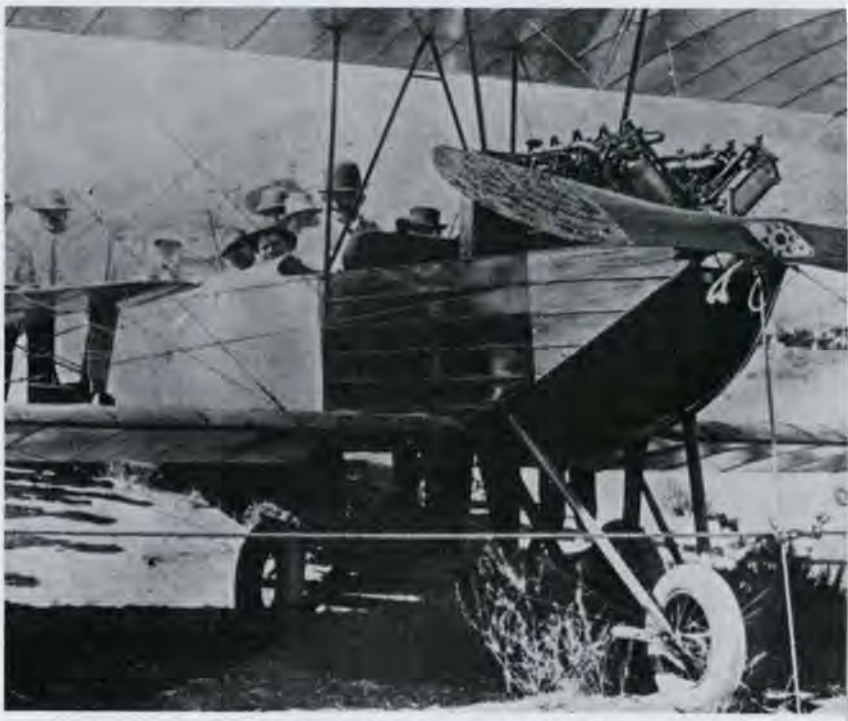
Bryant was an engineer as well and shortly after he arrived in Reno he began to have serious doubts as to whether the dual-engined planes would be powerful enough to lift off in the city's high altitude. To determine this for sure, he secured a hanging-weight scale from a local meat packer, staked it down at the field located at Moana Springs and devised a means of hooking it to the rear of his biplane. A five-minute test with the engines running at full blast confirmed his fears and he immediately wired a friend in San Francisco to send up ten gallons of special high-test fuel.

A stiff southwest breeze was blowing on the afternoon of June 19, but Bryant decided to go ahead with his first trial flight anyway. Four men held the machine as the propellers clawed the air. At a signal they turned loose and Bryant roared down the runway. Rising to 20 feet, the craft banked sharply to the southwest, but began a steep descent about three-quarters of a mile into the flight and came down in a grain field. Several automobiles full of spectators took off toward the landing spot, but Bryant was in no difficulty. The wheels and skids were mired in mud and the plane was towed back to Moana. A broken spark plug was later found to have caused the trouble.

About five o'clock on the afternoon of June 21, Francis made his first trial flight over the city of Reno. The event had not been announced in advance and the stuccato roar of his engines high in the sky drew hundreds of people into the streets. After a few circles, he returned south to Moana. A gust of wind caught him as he was coming in over a row of trees and almost downed his machine short of the strip, but he regained control and was able to land safely.

Bryant, with a theatrical flair, told newsmen that his partner had nearly frozen during the flight, his fingers becoming so numb that he could hardly manipulate the controls while coming in for his landing. Indeed, according to Bryant, Francis had to be wrapped in blankets and helped across the field to the mechanics' hut. The newspapers carried the story the next day and it achieved its purpose of whetting public interest in the flights, but there was little truth to it. Among those present at Moana Springs that day was 12-year-old Frank Steinheimer of Reno who recently said that Francis had a good flight and was in no difficulty when he taxied in. He denied that Francis was wrapped in blankets upon his return.

Francis made his first scheduled flight on June 23, soaring to 1000 feet and buzzing the grandstand on his first sweep and cutting loose a bundle of handbills on his second. He also did a series of spiral glides. Bryant also made a perfect, if less than spectacular, flight that day. The aviators' next engagement was in Goldfield on July 4, so they remained in town for a few days and Francis appeared again on June 30 at Moana during Elks' Day. At Goldfield, Bryant and Francis flew from the Tonopah & Goldfield railroad yards, soared north over the camp of Columbus and buzzed the crowd.



NEVADA HISTORICAL SOCIETY

In the years which followed and up to World War I numerous other pilots were testing Nevada skies including E. S. Thompson, Frank Burnside and Silas Christopherson. Of special significance was the first flight over the Sierra on March 22, 1919, and soon afterwards airports were laid out in Reno, Las Vegas and Elko. Air travel soon became vital to Nevada's tourist-oriented economy. To those who loved flying, the airplane was not merely a means of transportation and both racing and exhibition stunt flying were revived following the war.

National air racing competitions have been held since the late 1920's and the premier race of the country is held in Reno the second weekend in September. Besides aerobatic demonstrations, the National Air Races in Reno feature cross-country races, an unlimited closed-course race, women's races and a race for home-built biplanes. In recent years the races have featured precision navy and air force flying teams.

Baldwin, Wiseman, Ely and the other barnstormers might feel right at home in Reno.

At least once a year. □



# "I am the eagle"

By C. J. Hadley

With little sound except perhaps the flutter of a sail and the whistle of the wind, hang gliding has become America's way to experience pure flight. Wherever there's a hill, and a breeze, man has found he can fly. He can put on a wing and take off from cliffs, sand dunes, hillocks or mountaintops; he can soar, riding the thermals up, many thousands of feet higher than his take-off point. He can pick a spot in a far-off field and land right on target.

Powered flight was conquered by man back in 1903 but the closest thing to experiencing nirvana is flying with a trackless kite.

"The feeling is hard to explain," says pilot Ken Kuklewski. "It's really peaceful, total freedom." Kuklewski and Steve Sheehan are co-owners of Sierra Wind Sports in Reno and they are considered experts in the field of hang gliding. They sell gliders, but, more important, they teach newcomers the art of the sport. Neither suggests flying without preparatory training.

"I saw a guy fly off Rattlesnake Mountain near Reno early in 1974 and I knew I had to try it," says Sheehan, "so I went out and bought myself a standard 18-foot wing. I had no idea what I had and no one was around to show me what to do so I jumped off Rattlesnake Mountain and now I know I'm lucky to be alive. I don't recommend anybody doing what I did." Sheehan had prior experience in sport parachuting and knew what air and flight were about, but most people wouldn't have been so lucky.

*continued*

Hadley photos





## Hang gliding is freedom incarnate; America's way to experience nirvana.




*Standard rogallo (opposite page and top); competition wing (left); fixed or rigid wing (above).*

Kuklewski's beginning was similar. He bought a kite from an ad he saw in a surfing magazine and took it to a cliff near San Francisco. He watched other pilots jumping off, hooking back and landing on a narrow strip of beach. He followed suit but he, too, knows he was fortunate. "I knew nothing about aerodynamics. I didn't know what I was doing and had no fear at the time, but when I learned a little more I realized that there is an element of danger. I started wising up, wearing a helmet, taking it slower and getting a little more conservative."

It is only within the last five years that foot-launched flying has become feasible. It was started in Southern California where the ocean air is smooth and consistent. Experimenters were kiting off the cliffs using the most common wing, the "rogallo," which was invented by Dr. Francis Rogallo almost 30 years ago. From Rogallo's work (and the help of a $43 million research and development project by NASA) evolved the kites for today's sport flying.



Kelly Shewmaker Photo

**"Flying is tremendous. The world is at your feet, your senses are stimulated. The concentration is so intense, the blood racing through your body so fast, the rush is out of sight."**

The hang glider wings are made of high grade materials specifically designed for use in aircraft. The frames are aluminum, the sails dacron; all other hardware is stainless steel. Some come in kit form, others are preassembled and costs vary from $500 to $2000. Wings weigh from 35 to 50 pounds and are simple to assemble. There are two basic types of glider: the flex wing (rogallo) and the fixed wing. They hold to the same aerodynamic laws as everything else that flies – including airplanes, gliders and birds. In each case the wing forms an airfoil and when air moves over its surface faster than stall speed, dynamic lift is created, enabling flight. The maximum speed of a hang glider is about 40 mph; the record for the longest distance covered is 27 miles, time spent aloft more than 17 hours.

Pilot error due to inexperience has caused the majority of hang glider accidents. "People just figured they had to do it," says Sheehan, "and they were going way over their heads and flying in adverse conditions. These were the pioneers of the sport who had to learn the hard way."

There are an estimated 25,000 people flying gliders today; 47 of them died last year. "Overconfidence is the main problem . bad judgment," explains Kuklewski. "You don't ever have to worry about equipment failure if you put the wing together right, and check it prior to each flight. The manufacturers have to adhere to strict safety standards."

The owners of Sierra Wind Sports are emphatic about not flying without training, starting on a gentle slope, and not jumping off a 10,000-foot mountain until you are ready. When you are, the payoff is enormous.

Pilots should never take off downwind; it is not only difficult, but dangerous. If you have a 10 mph downwind and your wing flies at 20, you will have to go 30 mph in order to take off. As Sheehan points out, it's pretty difficult to run at 30 mph. "What you have to know about take-off is to start into the wind, with a neutral angle of attack. Sometimes you might have to crab it a little bit but you should always try to go straight into the wind.

"If you are too high, you'll stall – the wind will push you back and stop you so you must knife through the air with the wing level, running until the wind lifts you off the ground. If you get your air speed, you are going to be fine no matter what the wind is doing. Once you take off it's merely flying at a certain air speed for either the best glide or minimum sink depending on what you want to do."

Sheehan adds, "On a hang glider you are attached to the center of gravity of the wing; you are hanging by a harness and a light touch on the control bar will take you almost anywhere you want to go. You can fly prone or seated and use your body weight to move to the left or right." Prone is aerodynamically a better position to fly as there's more control but seated is more comfortable. "I enjoy flying seated because I can stay up longer and I don't get so tired. I'm into flying long ways, time and distance, and using special skills to take off."

Sierra Wind Sports, located at 1200 South Wells Avenue in Reno, offers instruction in the art of hang gliding. Their lesson price includes ground school (terminology, construction, safety, basic aerodynamics and micrometeorology), instruction books, a flight training

(Continued on page 62)

# Adah Menken



**Each night Maguire's New Opera House, like Adah's famous pink silk tights, was filled to the bursting point. By Annemarie Berg**

"Say, Jake, you think that there actress is really stark nekkid when she's tied on that hoss's back?" A be-whiskered miner raptly studied the flamboyant poster in front of Maguire's New Opera House. Bold black letters under the picture stated that Adah Isaacs Menken would be "stripped to the buff" in the daring play **Mazeppa** when it came to Virginia City.

Jake, equally be-whiskered, studied the titillating picture. "Don't see how the law would 'low her to be plumb nekkid. They do say when she put on that show in New York City women fainted dead away, and them as didn't faint walked out with their hankychiefs over their eyes."

His sun-seamed face beamed at the thought. Absent-mindedly he scratched a thick mat of unwashed hair, thereby disturbing small wildlife that dwelt therein. Both men waited patiently in a slowly shortening line. All the tonsorial parlors in town had struck it rich. Every miner and prospector in Washoe suddenly needed a shave, haircut and some fancy smelling water for the arrival of the beautiful and scandalous Menken, leading lady of the American stage.

When Jake finally sank into a still-warm, vacant chair, the barber cast a professional glance at the hairy head. "You ain't been in for ages, Jake," he commented acidly. "Guess you wouldn't be in now if you hadn't heard that actress has the prettiest shape in America."

"Wal, it'll shore be a treat to see some purty female legs," Jake sighed, "I bin out in the mountains so long even my ole mule's legs wuz beginning to look kinda good to me."

"That young reporter for **The Enterprise,** Mark Twain, just came back from San Francisco," the barber went on, "and he says she got $500 each performance

for 60 nights. Why, they don't even pay men that much!"

"Men ain't that purty," observed Jake dryly.

What had Virginia City, and the entire Territory of Nevada, all excited that March of 1864, was the coming appearance of the famous "Naked Lady." The 125 pounds of siren charm and intriguing beauty was going to perform in the elegant, newly-carpeted Opera House. Tom Maguire, who also owned the Opera House in San Francisco, regularly sent his finest theatrical troupes over the mountains to Virginia City. The once-crude mining camp appreciated entertainment of every type, and could well afford the very best for silver grew wild in the mountains. Sometimes as many as five Shakespearean companies competed with six or seven troupes of mummers, dog and pony shows, jugglers and minstrels, all in town at once.

But **Mazeppa** was something different. Every performance in San Francisco had been sold out before the star arrived in the city. Each night the house, like her famous pink silk tights, was filled to the bursting point. So what if the New York papers did refer to **Mazeppa** as "the worst play ever written" and said Adah was "an actress of little talent." La Menken with the small waist and long slim legs, instead of the usual dummy tied on the back of the "Wild Horse of Tartary," was carried to the pinnacle of success. She was the highest paid actress on the stage.

Naturally, she was also the most talked about. No woman had ever before appeared on stage in tights or created the illusion of nudity. As a matter of fact, theatrical history credits her with being the first burlesque queen. Her daring display and exquisite face accounted solely for the triumph of the atrocious play, **Mazeppa.**

Virginia City had avidly kept up with every detail of her well-publicized life. They knew she was shocking; wore her curly black hair cut short like a boy; used make-up and smoked in public and had even been known to wear men's trousers on occasion. She was accompanied by an inconspicuous third husband in a day when most women were grateful for one.

Strangely enough, Joe Goodman, owner-editor of **The Territorial Enterprise,** together with Dan De Quille, one of his editors, and Mark Twain, star reporter, all took a dislike to the free-wheeling actress before she arrived. Though Mark had been in San Francisco during the run of **Mazeppa,** he had not seen the play. Now he contemptuously referred to her as "a circus rider who belonged under canvas – not at Maguire's." Goodman promised they would be there opening night, in the free seats reserved for **The Enterprise** and muttered darkly about "roasting her good" in the papers.

Opening night found the three in "pressman's pew," wits and pencils sharpened for the assault. The Opera House was a packed mass of humanity that sat patiently studying the artistic oil painting on the magnificent curtain. About the time everyone had had his fill of "Sunset on Lake Tahoe," the curtain rose, gas flares dimmed, music faded, and the play began.

Then something happened. Enchantment drifted across the flickering footlights, caressing the cynical newsmen, encompassing diamond-studded gamblers and weather-beaten prospectors. It crept over the jam-packed crowd to the furthest reaches of the theater as a vibrant, melodious voice spoke to each man only. An adept charmer, with instinctive but practiced abandon, Adah responded to the lonely, women-starved men, sweeping through their hearts like a desert wind.

If the gestures of the slender figure were too-wide and sweeping; if she bounded about the stage too vigorously and over-dramatized her simplest speech, what matter? Like a shot of Washoe's finest raw whiskey, she filled them with a warm and mellow glow. The audience sat enthralled.

At last the climax! The famous nude ride. As the curtain slowly rose, it showed a wooden runway disguised as a rocky mountain trail. Zig-zagging back and forth across stage, up and up, it rose from the footlights to disappear in painted mountain tops high in the flies. This was the scene where Adah as the Tartar princess Mazeppa, stripped and lashed to the back of a fiery wild steed, was driven into the mountains to die.

Even Adah's severest critics could not deny her courage, for the runway was narrow, high and terribly dangerous. A slip of the horse's hooves could mean injury or death.

Fierce guards tied Adah to the horse's back, careful not to put themselves between her and the eager audience. Slowly the huge black horse began the ascent. There was no nonsense about a "pawing, wild stallion" as depicted on the posters, but the hollow clatter of hooves on the runway sounded ominous. The audience held its breath. Back and forth, up and up, the two went, giving everyone a chance to see Adah in the famous pink silk fleshings with "a little bit of dimity nothing around her waist." The miners fully realized that "in the buff" was only bluff and they took it good-naturedly.

After the final curtain, Goodman and cohorts, dashed



for the newspaper office. Each outdid the other rhapsodizing over Adah. "The race of infatuated pens was on" and for days the smitten men flooded the paper with such torrid praise that a disgusted fellow editor from California commented, "The editors of **The Enterprise** have gone crazy – but they didn't have far to go."

The miners adored her. To their delight she rode her horse astride, gambled openly and freely, losing as gamely as she won. Taking part in the night life of the Comstock, she went from bar to saloon to dance hall on the arms of the handsomest men in town. The Sazerac Saloon hung her picture back of their bar alongside that of her second husband, John "Benicia Boy" Heenan, heavyweight boxing champion of America. There was no rancour in Menken's heart as she gayly toasted Heenan. After all, hadn't she once said, "Marry young and often?" She was doing her best.

Virginia City Engine Company No. 2 made Adah an honorary member, and a lucky fireman was chosen to fasten a silver-embossed, red leather fire-belt about her tiny waist.

The miners took to naming everything after La Menken – streets, mines, babies even mules. A corporation formed The Menken Shaft and Tunnel Company. Eyebrows must have gone up two points on the various exchanges when stock certificates were received that featured a naked lady on a galloping stallion. Adah received 100 Founder's Shares which she promptly sold.

The roaring energy of Virginia City with its rumbling ore wagons and constant shrilling of steam whistles from the crushers, a life that never stopped night or day, found an echo in the vital, undisciplined La Belle Menken. She had a natural, easy camaraderie with "her boys," and time slipped away too soon. But the world beyond the Comstock clamored for the "Naked Lady." London and Paris were making exorbitant offers. It was time for La Menken to move on.

After her last performance the miners presented her with a bar of pure silver worth $2,000. In the past they had showed appreciation of performers by showering them with silver coins or nuggets, but lately there had been a few unfortunate incidents. A safer method of esteem had been devised. A bar of silver bullion, properly inscribed, made performers much happier than dodging flying silver, no matter how well-intended.

Adah's was a hard act to follow. No one ever superceded her in the miners' hearts. She promised "her boys" she would return, she loved them all, and she meant it sincerely – at the time.

For the next couple of years the people of London, Paris, Vienna, all worshipped at her shrine. Then the flaming star went into descent. Adah's miners would have understood only too well what happened. She had struck a rich lode in **Mazeppa** but now, like their own fabulous silver strikes, it had petered out. Only four years after her Comstock triumph she died in Paris, penniless and alone.

The miners, who remained true to the memory of their Adah, are long gone now. But somewhere in a deserted and forgotten corner of Nevada is an old abandoned silver mine once named for her, and high in the White Pine Range, 9000 feet above sea level, frigid mountain winds blow through the once-booming mining camp called Menken. □



*From Las Vegas to Nashville, this blue denim country girl is strictly big time.*

# Tanya Tucker

As an appearance in Virginia City in 1864 was a highlight in the career of Adah Isaacs Menken, so was a move to Las Vegas a turning point almost a hundred years later for another entertainer – Tanya Tucker.

Born in Texas, Tanya was nine when she first started singing on a Phoenix, Arizona, television show. From there the family moved to Utah where she was in a cameo role in the movie **Jeremiah Johnson.** By this time her father, Beau Tucker (now her agent) was convinced she could and should sing so they came to Las Vegas to further her career.

Then 13 years old, Tanya was able to connect with producer Billy Sherrill and her first big hit record, "Delta Dawn" resulted. Now, at 17, she has three albums and five straight hit records. As Adah Isaacs Menken might have said, "We've come a Long Way, Baby!"

# Gaming

## Thimblerig to baccarat, Harold Smith to Howard Hughes, Nevada gaming is open, flamboyant, and controlled. By C. J. Hadley

"Gamble, of course we gamble, nothing new about that. Hell, brother, Nevada's whole history has been one long gamble." And the miner from Tonopah was right, for everything that happened, everything dreamed of, fought and hoped for was a gamble.

Mining was Nevada's first entry into chance, and the lure of silver and gold brought people to the state. Crossing the desert was a gamble, but thousands tried it anyway, and there became a need for food. That, too, was a gamble because very little water could be found for agriculture amongst the strong pale stands of sage.

Even when Nevada Territory was formed in 1861 and a bill was passed prohibiting all forms of gambling, the players did not stop. "Mining went hand in hand with gambling and drinking," one journalist said, "so the law was promptly forgotten."

There were poker parlors with or without roulette wheels; the Chinese working for the railroads entertained themselves with a form of lottery called fantan; French monte dealers traveled from camp to camp, hustling whatever they could by their arts with cards. And there was thimblerig, where con men and their shills attracted innocents to their crooked games. Using three small cups and a pellet, they happily took the miners' inevitable losses in gold dust or cash.

Ever since man has been around there has been some form of betting. Many thousand years ago the Chinese invented lottery; on the day Christ was crucified, Roman soldiers threw dice for his cloak; and every day since at least one man or woman has made some sort of bet.

In July 1864, 36 delegates to the Constitutional Convention met in Carson City to draft a new bill banning lottery but allowing all other forms of wagering. When the legislature met the following year and voted the new bill in, it was vetoed by Governor Henry G. Blasdel. In 1869 the Assembly and Senate overrode the governor's second veto and initiated gambling license fees.

Nevada had always been a wonderland where penniless miners, with a little luck, could become multimillionaires. In the 1870's, Virginia City had a population of 18,000. There was one gambling house for every 150 inhabitants, 100 bars, 39 grocery stores and 15 butcher shops. There was also one library and a theater. If the arts had been more popular than gaming, there would have been 120 theaters.

Whether it was right or wrong was not to be questioned. Betting went on regardless of the laws. Local officials were more concerned with murders and other forms of violence, with settling boundary disputes and trying to stop cattle rustling to concern themselves with gambling – which was considered the least of their problems.

"It's immoral," screamed the Women's Civic League and the Anti Gambling League in unison and put a great deal of pressure on the legislators. In 1909 – and ignoring what is and what will ever continue to be a national pastime – the Nevada lawmakers prohibited any and all games of chance.

The bill went into effect October 1, 1910 and was immediately ignored.

Gambling had been a way of life since pioneer days. What else was there to do? Operators and players did, however, try to be more subtle. Instead of having poker parlors and faro games that could be seen from the street, the games were moved to dark and secret, back or basement rooms. Gambling went on, the establishments that catered to it just had better doors.

With prohibition of gambling the state could never win. It lost licensing money; it had to cope with complaints of crooked games, illegal equipment, infiltration of undesirables. Corruption of police and other officials by payment of protection money was typical. It took only two years for the legislators to make another change. They wrote a statute allowing the playing of social games – poker, whist, 500 – providing money was not used as a prize. Operators could pay off in cigars, drinks, or merchandise.

The reformers were still not satisfied and, in 1913, got the act repealed. As could be expected, that didn't work either so the 1915 Legislature reversed itself again, writing a bill allowing the playing of any card game if the deal changed every hand. State and local license fees were required.

Legal games had little appeal to the seasoned gamblers who continued to patronize the underground parlors. The law was ignored, enforcement less than adequate. License fees collected were very small indeed.

For what Iowa or West Virginia might consider sinful, Nevada was fast becoming famous. Not only were its divorce laws liberal, its tolerance of wide open gambling well known, but its lack of enforcement of the Volsteadt Act (Prohibition) began attracting tourists to the state.

It was 16 years later when cowboy Phil M. Tobin, Assemblyman for Humboldt County, caused a stir during the 1931 Legislature by producing a bill to repeal the ineffective law. He said he was sick of seeing money that should go to the state and counties going into the pockets of officials. Even though he was no gambler, Tobin wanted to see gambling out in the open so it could be controlled. He wanted the state to benefit from the





NEVADA HISTORICAL SOCIETY

*The players carried on, even when the game was prohibited.*








fees that could be imposed — which could also help Nevada through the Depression.

With little opposition, Tobin's bill was passed and signed into law on March 19 by Governor Fred B. Balzar. Celebrations lasted many days as the law was liberal, permitting approved operators, upon payment of fees, to deal cards, dice, roulette; to have slots, bingo and other games; and to accept bets on events such as horse racing, football, baseball and elections. Everything except the sale of lottery tickets was allowed, that being forbidden by the State Constitution.

Through the '30 and '40s, Reno was gaming's hub. As soon as the law was made public, Californians poured over the Sierra Nevada mountains from San Francisco, Sacramento and Lodi. They have yet to stop. The Las Vegas City Council had restricted their licenses to six in 1931; it took them 10 years to realize gaming's potential.

Las Vegas became a town in 1903 because the Union Pacific Railroad used it as a division point to serve the gold mining communities of Bullfrog, Rhyolite and Beatty. Two years later the railroad mapped out a town and sold lots but it took 24 years more to see a real sign of growth.

The Federal Government was attempting to harness the Colorado River as its lower fertile regions (and a lot of the country's crops) were being wasted by terrible floods. Water was to be held at Lake Mead as a source of irrigation to the farms below. A hydroelectric power-plant would be a by-product. Hoover Dam was built, taking six years and employing many thousands.

The workers looked for ways to relax, a friendly place to spend their money, and Las Vegas was quick to please. New clubs opened up along Fremont Street in the downtown area. One of the first hotel/casinos was the El Cortez, which is still in existence. Roulette, craps, 21, slots and poker were offered as well as big six and wheel of fortune. Faro, chuck-a-luck, panguingui and bingo also were played.

During the same era, Harolds Club opened in Reno. It was the first club to run a 1 cent roulette game to encourage small-time players; it was the first to advertise on billboards worldwide. Harolds Club was looking for volume business so made its premises bright and attractive. It was the first club to hire women dealers, partly to encourage female players and partly because most of the men had gone away to war. Even though it started



as a $500 hole-in-the-wall, it became, for a while, the biggest and best casino in the state.

But the north was to be surpassed. During the war years, people were tense and looking for relief in entertainment. War profits had to be spent. Texas money started flowing into southern Nevada along with tourists from Los Angeles. Eastern money filtered west from sources that were questionable.

Nevadans realized their one home-owned, home-controlled gaming industry was slipping out of their hands. State officials wanted to know more about the operators. New controls were applied. An amendment was passed in 1945 which empowered the Nevada Tax Commission "to make rules and regulations governing conduct of gambling and to issue state licenses." This took the pressure off local communities. The seven-man Commission was appointed by the governor and represented the state's basic industries – mining, agriculture, business, finance. The members were to adopt far stricter policies to regulate gambling casinos.

Applicants had to show a relatively clean bill of health; their backgrounds were investigated, their fingerprints checked with the FBI. Casino licenses could be revoked if operation was not in an orderly and lawful way. The amendment also imposed a state tax on every gambling house of 1% of their gross revenues. Prior to that the state got 25% of the fees collected by counties and towns.

It was 1946 when Benjamin "Bugsy" Seigel built the Flamingo on the relatively new and quiet Las Vegas Strip. He used a million dollars of his own, four million of other investors' money. He was wanted for murder in New York and was said to be setting up a wire service for the eastern mob. His club was as oppulent and extravagant as the Los Angeles/Hollywood crowd could have hoped for. His flashy style was to be copied for more than two decades.

Nevada officials trembled when Seigel was killed by a shotgun blast shortly after his Flamingo was finished. The sensational press coverage allowed for the gangland slaying (which happened in Beverly Hills) did not slow up construction on the Strip. Outside money kept pouring into Vegas, along with millions of fascinated tourists. One plush resort after another was rushed to completion.

Gaming taxes for 1947 brought $670,000 to the state. The Tax Commission's power was increased.

El Rancho Vegas was the first resort to be built on the lonely strip of Nevada highway to the south of the city limits. Prior to 1940, all the action had been downtown. After El Rancho it was the Last Frontier and Flamingo, then the 20-acre Thunderbird. The 400-room Desert Inn, which was completed in 1950, included a pool, outdoor terraces, health club, restaurants, solarium, show lounge, 18-hole golf course and 24-hour meal service in rooms. The Desert Inn cost $5 million; $750,000

(Continued on page 60)

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## Yesterday

# First July 4th in Nevada




IN JULY 1868 the neighboring mining camps of Hamilton and Treasure Hill in what is now White Pine County, joined to observe their first Fourth of July. Committees were appointed (according to an account by Fred Hart) on "Flag," "Music," and "Ball of the Evening." The complacent Flag Committee awoke with horror on July 2, to the realization that the nearest flag was in Austin, 120 miles away. Music was easier, as a man named Pike could play the "Arkansas Traveller" on the violin, and parts of a quadrille. Two women were available for the Ball.

A sub-committee was appointed to follow Pike and keep him sober for the event, only three drinks per hour being allowed him on this eventful day. The Flag Committee in desperation began a search for flag materials. They located and confiscated in the public interest, a bed quilt with red calico lining. They "borrowed" white canvas tenting from a store. And finally they heard of a Mormon family camping in the gulch below town that had a blue veil, and what was more, four girls and their mother.

The committee immediately called on this family and obtained the blue veil for the flag. The five ladies increased the number of the fair sex for the Ball by 250%, but the mother explained that none of them had any shoes. A shoe committee was immediately appointed and quietly obtained several pairs of brogans borrowed from the miners. Shoes were important as the rough board floor of the "ballroom" was splintery.

So, at the appointed time on July Fourth, the parade formed in Hamilton and marched up the hill to Treasure City. Since there was no band, a couple of good whistlers followed the flag, then the Mormon girls, then Pike and his body guard, and then the rest of the town. At Treasure Hill the procession paused for Literary Exercises, with the speaker of the day talking from the top of the town watering trough. At the conclusion, the assemblage applauded warmly and passed a resolution that the flag, then flying from a pole, should form a part of the society's archives for the newly organized White Pine Pioneers. Sad to say, in the rush that followed to new strikes, the flag was inadvertently used as a bed sheet, and lost to posterity. □

*EDITOR'S NOTE: This is another in a series of reprints of ads run by Harolds Club two and three decades ago featuring tales of early Nevada.*

# Show Guide

## LAS VEGAS

**Aladdin**
*Continuous lounge entertainment*

**Caesars Palace**
*Paul Anka, Dec. 26-Jan. 1; Feb. 12-25*
*Frank Sinatra, Jan. 15-21; Mar. 4-10*
*Steve Lawrence and Eydie Gorme, Jan. 29-Feb. 11*

**Castaways**
*Piano bar, Tom O'Keefe, Rusty Isabell*

**California Hotel**
*Frankie Carr's Nov-Elites*

**Circus Circus**
*Continuous circus acts*

**Desert Inn**
*Bobbie Gentry, Dec. 26-31*

**Dunes**
*Casino de Paris '76*

**Flamingo Hilton**
*Vive Paris Vive*

**Frontier**
*Roy Clark, Dec. 30-Jan. 14*
*Bobbie Gentry, Jan. 15-Feb. 11*
*Robert Goulet, Feb. 12-25*

**Golden Nugget**
*Dennis Agajanian, Jan. 2-11*
*Sassy Class, Jan. 13-25*
*The Vagabonds, Jan. 27-Feb. 15*
*Toni Ingraham, Feb. 17-29*
*Judy Lynn, Mar. 9-21*

**Hacienda**
*Spice on Ice*

**Holiday Casino**
*Wide World of Burlesque*

**Landmark**
*Country Music, USA*
*Barbara Fairchild, Dec. 26-Jan. 25*
*Hank Thompson, Jan. 26-Feb. 22*

**Las Vegas Hilton**
*Ann-Margret, Dec. 23-Jan. 5; Mar. 9-29*
*Bill Cosby, Sha Na Na, Jan. 6-26*
*Liberace, Feb. 10-Mar. 8*
*Goldie Hawn, Mar. 30-Apr. 19*

**Marina Hotel**
*Bare Touch of Vegas*

**MGM Grand**
*Shecky Greene, Dec. 25-Jan. 7; Mar 11-24*
*Dean Martin, Jan. 8-14; Feb. 12-18; Mar. 25-31*
*Helen Reddy, Jan. 15-28*
*Mac Davis and David Brenner, Jan. 29-Feb. 11*
*Sergio Franchi and Joan Rivers, Feb. 19-Mar 10*

**Mint Hotel**
*Current, Jack Bedient and The Chessmen*

**Riviera**
*Smothers Brothers, Anthony Newley, Dec. 26-Jan. 8*

**Royal Inn**
*Continuous lounge entertainment*

Royal Las Vegas
*Burlesque '76*

**Sahara**
*Jerry Lewis, Jim Bailey, Jan. 5-10; Jan. 12-17*
*Merle Haggard and Kay Starr, Jan. 19-28*
*Totie Fields, Jan. 29-Feb. 11*
*Buddy Hackett and Sammy Cahn, Feb. 12-25*

**Sands**
*Wayne Newton, Dec. 26-Jan. 27; Feb. 8-Mar 16*
*Robert Goulet, Jan. 28-Feb. 7*

**Showboat**
*Ed Diamond*

**Silver Slipper**
*Monica Myers, Jan.*

**Stardust**
*Lido '76, 11th Edition*

**Tropicana**
*Folies Bergere*

**Union Plaza**
*Norman Is That You, Broadway Entertainment*

## RENO-SPARKS-CARSON CITY

**John Ascuaga's Nugget**
*Gaylord & Holiday, Toni Ingraham, Jan. 15-28*
*LeRoy Van Dyke, Jan. 29-Feb. 11*
*Judy Lynn, Feb. 12-Mar. 3*

**Eldorado**
*Ed Cree, closes Jan. 4*
*Larry Johnson, opens Jan. 6*

**Harolds Club**
*All New Mini-Burlesque of '76, Ind.*

**Harrah's**
*Glen Campbell, Jan. 5-14*
*John Davidson, Jan. 15-28*
*Smothers Brothers, Jan. 29-Feb. 11*
*Totie Fields, Feb. 12-18*
*Merle Haggard, Feb. 19-25*
*Roy Clark, Feb. 26-Mar. 17*

DATES AND PERFORMERS SUBJECT TO CHANGE

**Holiday Hotel**
*Jo Carney, Cal Bezemer Trio, Jan. 5-31*

**Mapes**
*Kenny Armstrong Orchestra, dancing nightly*

**Ponderosa**
*Lounge entertainment nightly*

**Jessie Beck's Riverside**
*ReeRee and Clyde, Jan. 1-11*
*The Johnny Vanelli Show, Jan. 11-31*
*The Kenny Vernon Show, Jan. 12-31*

## LAKE TAHOE

**Harrah's**
*Doug Kershaw, Jan. 5-8*
*Mac Davis, Jan. 9-11; Mar. 19-Apr. 1*
*Glenn Yarbrough and the Limelighters, Jan. 12-15; Jan. 19-22*
*Glen Campbell, Jan. 16-18*
*Frank Sinatra, Jan. 23-25; Feb. 27-29, Mar. 12-14*
*Wayne Newton, Jan. 30-Feb. 1*
*Bill Cosby, Feb. 6-8*
*Merle Haggard, Feb. 13-16*
*Neil Sedaka, Feb. 20-22*

**Harvey's**
*Ron Rose & Dottie Dodgion, thru Jan. 31*

**Hyatt Lake Tahoe**
*The Dave McMillan Tiger Show, thru Mar. 28*

**North Shore Club**
*Lounge entertainment, Fridays & Saturdays*

**Sahara Tahoe**
*Jerry Lewis, Jan. 30-Feb. 1*
*The Fifth Dimension, Feb. 13-15*

## ELKO

**Commercial Hotel**
*The Links, Jan. 5-25*
*The Matys Brothers, Jan. 5-18; Mar. 1-14*
*Ernie Menehue, Feb. 2-22*
*The Diamonds, Feb. 23-Mar 14*

# Entertainer

## TELLY SAVALAS



With a head that is bullet-smooth and a face that can be alternately gentle or fierce, Telly Savalas made the transition from a highly successful and dedicated State Department diplomat to a highly successful and dedicated actor.

Tall, physically imposing and legally know as Aristotle Savalas, Telly was born in Garden City, Long Island, into a large and lively family. His first major film, "Birdman of Alcatraz" brought an Academy Award nomination for best supporting actor. Best known as TV's Kojak, this unique actor of Greek heritage has been seen in 18 movies.

In his earlier career as executive director of the State Department's English language transmissions to the Near East, South Asia and Africa, Telly approached his work with the reverence of a man imbued with deep love for the country of his birth and an impassioned desire to tell the American story.

Telly earned a bachelor degree in psychology with honors, entered the field briefly but found it disappointing. The education, however, opened other doors to him and he joined the information services of the State Department where, two years later, he became an executive director.

When the State Department moved its informational branch from New York City to Washington, D.C. three years later, Telly became a senior director of News and Special Events for the American Broadcasting Company. He created a program titled "Your Voice of America" which won the Freedom Foundation Award for the network.

His unorthodox collision with the world of acting came when a theatrical agent asked his help in finding an actor who could bring authentic speech rhythms to the role of a European judge. Unable to find a candidate, Telly himself went to the audition on a whim, read for the part, and to his astonishment, was signed for the show. Except for some broadcasting with the State Department and the narration of films for the United Nations and the National Broadcasting System during his student days at Columbia University, he was wholly inexperienced as a performer.

What seemed a freak circumstance to Telly became the beginning of an acting career. He was chosen by David Susskind for a part in a pilot film in the belief that he was a seasoned actor. Also impressed by Telly's commanding presence, Burt Lancaster brought him to Hollywood to play the hardened convict in a cell adjoining his in "Birdman in Alcatraz."

Savalas lives in Beverly Hills with his wife and three daughters. □

## Profile

By M. J. R. Arthur

# Portrait of a professional buck hustler

"Writing is agony for me but I do it because I'm not a good money counter-feiter," says Gilbert A. Ralston, author, screen writer, TV-movie director, producer, lecturer and dean of the School of Communicative Arts. "I re-write many times," he explains. "Once I wrote a short story 66 times and never sold it. I'm not saying that there's not a kind of pleasure in writing, but like climbing a mountain, it's murder to get up and fun when you reach the top.

"Still, the idea of having a blaze of euphoria is silly and highly unprofessional. Writing is bloody hard work and you drive yourself endlessly. I keep on writing because I'm afraid to stop. Once I stop I'll quit forever. I write for money. Once I used to work 12-14 hours a day. Now I've reached the stage where I don't have to push so hard. I'm in my dotage and can do pretty much as I please."

Ten years ago, Ralston and his wife, Mary, left the hectic metropolitan life of Los Angeles and settled in the pastoral, unpolluted town of Genoa in a century-old estate. Ralston's office in the former carriage house is equipped with tape recorders, dictaphones and other devices of the 20th century. This dichotomy of past and present is paralleled by the author's personality and philosophy. Although a sexagenarian, he is a man of now and tomorrow.

His short stories have appeared in the **Saturday Evening Post, Alfred Hitchcock Magazine** and many other major publications. Among his 425 TV credits are scripts for The Untouchables, Big Valley, Star Trek and The Name of the Game. He produced 14 pilot films for CBS, Warner Brothers and Desi Arnaz Productions. **Willard,** his movie about a pet rat, starring Ernest Borgnine, grossed over $8 million, and its sequel, **Ben,** a rat saga, was equally successful.

In spite of his lucrative career in the field of motion pictures and television, Ralston now concentrates on writing novels. His themes alternate between horror and humor. **Cockatrice,** a name derived from witchcraft, is a mystery, and **The Frightful Sin of Cisco Newman,** is a comedy about three kids setting out to kidnap the pope. His wild west comedy **Bluebonnet** was followed by a biography of Burton Turkus, the assistant D.A. who disposed of Murder, Inc. Seventeen action-mystery Dakota books make up his most recent series. The setting is the vicinity of Genoa, Minden and Gardnerville.

There is an earthy untinted honesty about Gilbert Ralston. The recipient of numerous magazine awards, he has no illusion about getting a Pulitzer or Nobel prize. "I'm a highly skilled professional, but not even by the wildest stretch of the imagination will I be a contender for a Nobel prize. If I got one, it would be a gargantuan literary joke."

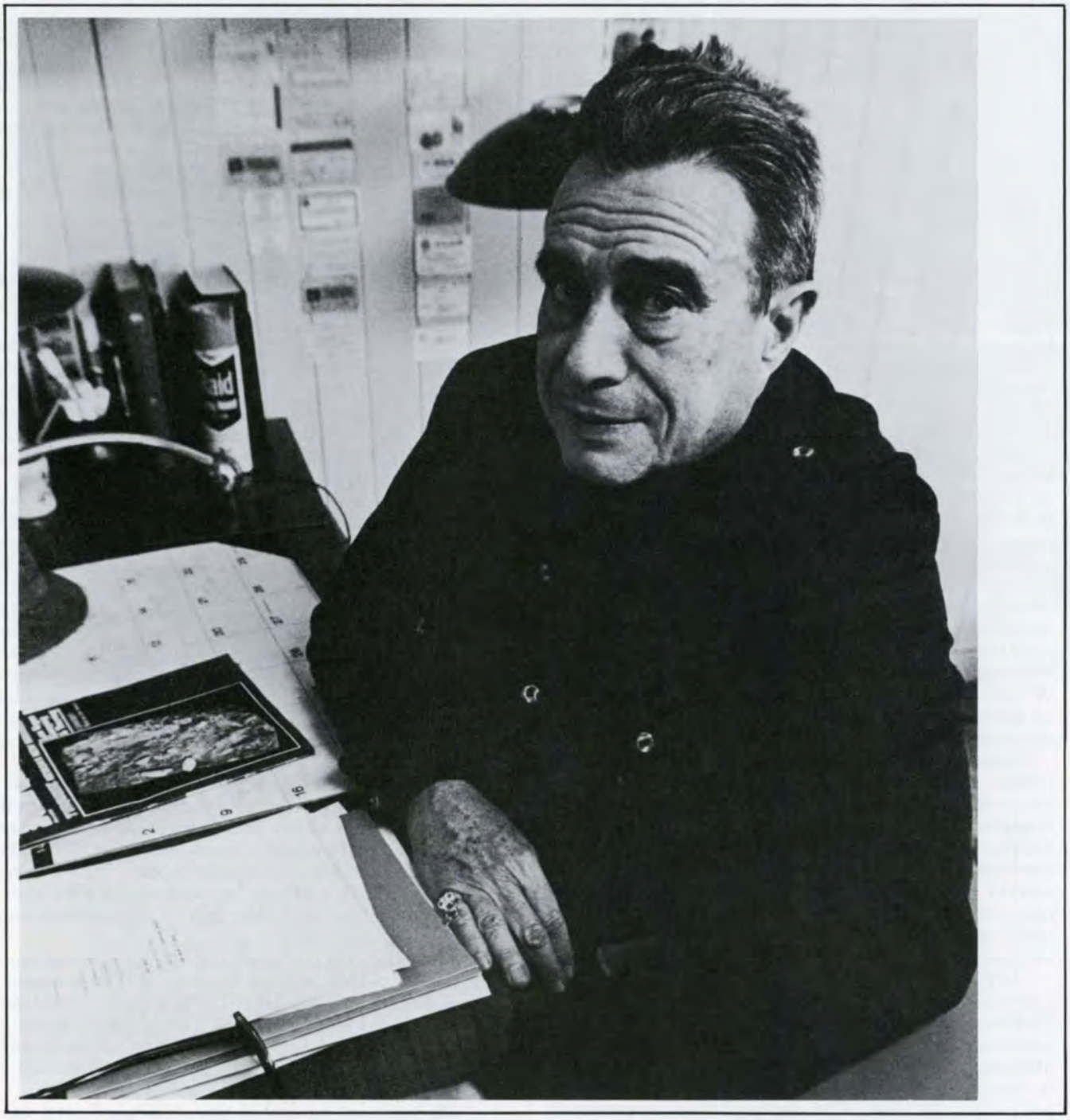
Ralston keeps himself physically fit by biking and exercising daily. He has been a judo man, boxer, race-car driver, pilot and fencing instructor. Above all, he attributes his well-being to his wife, a nutritionist who does not allow him to get sick.

The Ralstons have two sons and five grandchildren. One son is a staff anesthesiologist at Walter Reed Hospital and the older one is an atomic physicist in the navy. "Frankly, my sons scare the hell out of me," he says proudly. His statement is surprising considering his own educational background. A graduate of Pasadena College and the American Academy of Dramatic Arts, Ralston also did scholastic work in contract law, archeology, geology, semantics and astronomy. He is bi-lingual in French-English and also speaks some Spanish and Italian. He is one of the two founders and president of Sierra Nevada College in Incline Village.

Discussing the disintegration of family life, he says, "I believe in family life. We're throwbacks, we have an Irish patriarchy in our family. I believe there's a serious return to the old fashioned family virtues among the young now. Like all rebels, they've tried every kind of experiment in this area, and since nothing worked, the kids go back to the old ways. They have a strong need for a familiar base that gives reference for their lives, and that is the family."

A "no smoking" sign hangs on his office wall. "I have spectacular vices but smoking and drinking are not among them. I like to gamble. We're building a casino but I can't tell you where. It's like this. I'm an ice cube in an enormously large business iceberg and I can't reveal what the berg is doing. My associates and I get

Hadley photo



involved in crazy things. Right now we're setting up a kingdom, honest to God. We'll look for a dingy little island that wants to secede. Yes, many things start out as a joke because we don't take ourselves seriously. Life is an enormous pleasure."

Among the things he enjoys are animals, gut poets and classics, especially Chopin and Russian choral music. When asked about hobbies, he chuckles and says, "I'm a collector of dingbats. You see, I'm kook-prone. I guess it started with my father, a wild fellow. He's dead but he still breaks me up. To put it politely, he was a professional collector of other people's money. He even practiced medicine without a license.

"And there's my friend who spent two years and plenty of money to re-build an organ in his house. After he was finished, he suddenly realized that he couldn't play the thing. So he took lessons. Yes, I collect dingbats like beads on a string."

Ralston has traveled professionally all over the world making documentaries, but he does not believe in recreation. "I don't recreate. I always function on an explosive level. Run and split, that's me. I've enough ideas in my head for the next 200 years."

An impish gleam sparkles in his eyes as he tells about his philosophy of life. "It changes from day to day, minute to minute. In general, I try to live without worry and make every minute of my declining years count for something. I'm primarily concerned with myself. Creative selfishness is a great virtue."

His smile broadens as he adds, "I know you wanted to do a profile of a novelist. Instead, I've given you a portrait of a professional buck hustler." □

**Agriculture**
continued from page 17

In some areas of the state, land that included irrigational water rights has been transferred over for residential and municipal uses. "The Truckee Meadows near Reno is a prime example of people taking over the water for irrigation. Subdivisions go in, agricultural land goes out, and the water goes into houses instead of on the land."

The Dutch Flat section north of Winnemucca is a typical area where permits are restricted. Winnemucca Farms (Krakow and Sons) owns 15,000 acres of uniform ground where they grow Russett Burbank potatoes rotating with wheat, beans and barley. The area has good soil, excellent climate, quality water and disease-free growing conditions. Clair Krakow has potato interests in Idaho and investigated Washington and Oregon for new potato-growing properties before he found Dutch Flat to be ideal.

Don Krakow, son of the owner, runs the farm while his brother Jerry is manager of the produce company. A. J. Evans is the overall general manager. "We came from Idaho five years ago," Don says. "I prefer Winnemucca; the soil is better, the farm is bigger. It runs three miles square and we have no short rows so it's easier to farm. In Idaho we lease our land from the Indians so we have no tangible assets. My dad was lucky to find this much good ground in one spot." He adds, "We manage 7,000 acres here, leasing half of our land to Katseanas and Ashment Farms who also grow potatoes and grain. We get about 400 sacks of potatoes to the acre but end up getting paid for only 325 because the rest is shrink, tear and unusables."

Krakows were the first to put in temperature controlled, humidified storage sheds. They have 12 enormous sheds that hold 270 million pounds of potatoes. Russetts store better than any other potato, and Krakow's 150 employees can pack and ship 10,000 hundredweight sacks daily, continuing for nine or 10 months a year. "Six years ago we used to move three cars a day and thought we were moving a lot of potatoes," says Don. "The freshpack sheds are designed better now and we can move 10 cars. That's progress."

A. J. Evans has been in the potato business for 28 years. "Growing Russetts requires a lot of know-how and Krakow and his boys have that. These potatoes require more care than most other varieties and they need a lot of water – at least a third more than grain. Power supply is important here because we have to pump the water, and we have 50 wells. Climatic conditions are extremely important. Cool nights and warm days are a prominent factor in the quality of the potato."

It was too expensive to haul process grade potatoes to Idaho from Winnemucca so Krakows made a contractural arrangement with the R. T French Company which put in a processing plant next door. French's makes instant mashed potato flakes from small, damaged or misshapen potatoes. These are sent to Proctor & Gamble to be made into Pringles potato chips. The processing plant fills 1100-pound cartons with powdered potato flakes every 20 minutes from September to June. Very little potato is wasted. The residue, peel, trim and liquid is sold to a cattle feed lot at nearby Orovada.

"Even though production in the Winnemucca area exceeds that of Idaho on a hundredweight per acre basis, there are other factors involved," says Evans. "Power rates here are twice what they are in Idaho and water is nowhere near as plentiful. We suffer better than 46 cents a hundredweight extra cost in freight moving to the prime markets in the East. People may not be willing to accept the fact, but the price of food had to go up along with everything else. The price of gas is higher and we run about 200 trucks a day hauling potatoes during harvest. Every darn one of them runs on fuel; cost of equipment has doubled; the price of labor and fertilizer is up. Today the cost would be prohibitive to put in the kind of irrigation system we have. All of these things go into the price of the product."

Grain production has increased in Humboldt County primarily because the potato growers use grain for crop rotation. In 1969, 2,649 acres of grain were planted and five years later county records showed 14,000. In 1975 there were 22,000 acres.

The trend for the future is in fewer and larger ranches and farms. Most of the large beef outfits are found in Elko County, sheep in White Pine County, whereas the biggest dairy herds are in the south near Las Vegas. The average Nevada ranch size is 4,500 acres; the state ranks second in the nation to Arizona in the largest size units.

"Instead of making $50 per acre on 50 acres like you could 20 years ago, you now make $5 per acre on 500 acres and come out the same," says cotton farmer, Tim Hafen. "The only way you can stay in business today is with more units. Beef is selling for the same price today that it did 25 years ago. Why? How can you stay in business? With more units. That's the only way." Hafen has been farming in Pahrump Valley since 1951. "Until five years ago I sold real estate too because we needed the extra income. We plant 1300 acres here, rotating cotton with small grains, alfalfa and milo. We are trying sugar beets for seed production and we also grow a few melons."

Cotton has been grown in Pahrump Valley since 1948. It is a weather-sensitive crop which will not mature if the season is too short. Many southern farmers are switching to alfalfa which is much less risky. "Weather doesn't affect alfalfa like it does cotton," Hafen says. "You could lose 15% of your hay crop during a bad year, but you could lose more than half of your cotton crop and be out of business."

Hafen asks, "Do you know that the value of our land here is $1.5 million and we have more than a quarter million dollars in equipment? Do you know what I get out of this kind of investment? I could probably say I take all of $20,000 a year. I am building up assets and my profit comes when I sell, but in the meantime I don't make a profit, I just make a living."

With irrigation, several of Nevada's once brown valleys have become profuse with crops. During the state's 112 years, its agriculture has progressed from a 30-acre garden in Carson Valley into a multi-million dollar industry. Nevada's total agricultural revenue for 1973 was $161,400,000; production expenses were $113,200,000 leaving total net income per Nevada ranch or farm averaging $25,636. In 1974, cattle prices were so low that Nevada's gross was $136,500,000 and expenses rose to $118,000,000. Average income dropped to $16,159.

With 657,000 head of beef cattle, 14,000 dairy cows, 151,000 sheep, 26,000 chickens, 10,000 hogs and pigs, with fields covered with cotton, wheat, barley, oats, alfalfa, potatoes, melons, onions, garlic, dill, asparagus, and hay, Nevada, with 550,000 population, is producing more livestock, potatoes and hay than it needs. By California standards the numbers are small; in a desolate and watershort state like Nevada, that's a whole lot of agriculture. □

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P



*The mineral that brought the rush to the west, a piece of placer gold. Inset photo is of azurite copper ore.*

Then & Now

# Mining

There's still gold and silver in those hills, but the big money is in sand and gravel. By La Verne Rollin.

In 1876, as the nation celebrated its first centennial, the Comstock Lode in Virginia City was in the prime of its climactic history. It produced, that year, $45,653,477 in gold and silver. The world was duly impressed.

Earlier effects of the great bonanza had created the State of Nevada, bolstered the Union to end the Civil War, built the fortunes of mining kings, opened the San Francisco Stock Exchange, founded a newspaper empire, laid two Atlantic cables, and shaken the world's monetary system. It was a century in which the raw State of Nevada had played a short but spectacular role.

During the next 100 years, Nevada mining went through alternate cycles of prosperity and depression, but it has remained the state's leading basic industry throughout its kaleidoscopic history.

People see the ghost towns, the abandoned dumps, the pock-marked hills scarred by the hands of restless prospectors and they are touched by the relics of a past era. To the millions of visitors and new citizens of Nevada, the remnants of faded glory are visible because they are along the roads and are part of the towns that early mining built. What the casual traveler does not see in the wide stretches of Nevada's mountains and valleys is the great modern mining industry that is second only to gaming in its impact on the state's economy.

In 1975 for the first time, the state produced more than $250 million in mineral wealth. In 1976, Nevada mining is expected to set a new record.

*Prospectors in Goldfield, 1903.*



Hadley photos

NEVADA HISTORICAL SOCIETY



*Pouring molten copper at the Kennecott plant at McGill.*

The lonely prospector and his burro hold an affectionate place in Nevada history, but mining has come a long way since the days when a few flecks of gold or a rich outcrop of silver could spark a mining boom. Sunday prospectors abound (the Mackay School of Mines at the University of Nevada in Reno still teaches prospecting to the public) but they are usually equipped with modern instruments and know something of geology and mineralogy.

"Big" metal mining in Nevada is based primarily on big machines, big corporations, big money, and low-grade ore. In fact, the rich ore of a century ago is rarely found today. Silver and gold from the "bonanza vein" of the Comstock reached a value of over $1,000 a ton. The gold being mined by the Carlin Gold Mining Company in Eureka County today is "submicron sized" and averages about 0.32 ounces per ton. But Newton Mining Corporation, which owns the Carlin mine, thought enough of the ore to sink millions of dollars in developing it, and today, 11 years later, Carlin is the second largest gold producer in the U.S.

The 11-million-ton ore body, stretching nearly two miles over the crest of the Tuscarora Mountains, is being open-pit mined. Low-grade ore requires huge daily tonnages to make an operation feasible, and large tonnages are possible only with large and costly surface equipment.

The big names in Nevada metal mining are Anaconda, Newmont, Duval, Kennecott, and all are working open pits for low-grade ores. The counties where the big companies operate — Lyon, Eureka, Lander, and White Pine, respectively — are economically dependent on mining. All other counties in the state have some mining to contribute to the economy.

There were over 200 mining operations in Nevada in 1975, employing more than 8,000 people. This figure includes Titanium Metals Corporation of America in Clark County, the state's second largest mineral operation, which is involved solely in manufacturing titanium metals.

"Metal is the backbone of civilized life," said Dr. Jacob Bronowski in **The Ascent of Man.** Man seeks gold, invites commerce, establishes new societies. And Nevada followed the pattern meticulously. From the seeking of gold came the discovery of more riches — other precious metals, base metals, nonmetals.

Nevada has produced gold and silver; copper, iron, tungsten, lead, zinc, mercury, manganese, molybdenum, antimony, beryllium, uranium, lithium, barite, borax, brucite, clays, coal; diatomite, fluorspar, gypsum, lime, marl, magnesite, perlite, petroleum, pumice, salt, sand-and-gravel, stone, sulfur, talc, vermiculite, volcanic ash and cinders, and many others. In a separate category are Nevada's famous gemstones — turquoise, variscite, and fire opal.

Today, copper is the state's leading mineral, followed by gold and, of all things, sand-and-gravel, the prosaic, ubiquitous nonmetallic mineral combination which, indispensable to construction, is found practically everywhere and is worth millions.

The steady growth of the mineral industry in Nevada over the past few years and the inevitable future growth of exploration and development are due to an increased world demand for minerals. It is a fact that, in spite of its long history of mining, the broad lands of this state hold promise of many untapped mineral resources. New technology, new equipment and instruments, and new chemical and metallurgical processes are opening up vast possibilities in mineral discovery and research.

More than two million dollars are invested in exploration each month in Nevada. There are over 50 mining companies with exploration and development offices in Reno alone. The Anaconda Company is expanding its Nevada copper operations from its traditional base in Lyon County to a new development at the Victoria mine in Elko County. Placer Amex has a large new open-pit mine near McDermitt in Humboldt County that will be producing 20,000 flasks of mercury a year. This would make it one of the major mercury mines in the world.

Twenty-four barite mines in Elko, Eureka, Lander, Lincoln, and Nye Counties are producing more of this



*U.S. Gypsum at Empire produces gypsum ore used for wallboard and other building products.*

important mineral (which is used in gas drilling) than any other area in the country. The largest lithium producer in the world, Foote Mineral Co., is operating from the brines near Silver Peak in Esmeralda County. Basic, Inc. at Gabbs in Nye County manufactures refractory brick and other products from the largest magnesite deposit being mined in the world.

Union Carbide will open a tungsten mine at Tempiute in Lincoln County this year. Eagle-Picher Industries is completing a 50% expansion of its diatomite plant near Lovelock in Pershing County. Carlin and Cortez, Nevada's major gold producers, will be joined by another big producer when Copper Range Company places its Round Mountain mine in operation in Nye County.

Also, because of a renewed interest in smaller deposits, many other gold and silver mines are in the process of development. With higher prices for precious metals and increased demands for all minerals with new technology permitting lower investment and operational costs, and with laws to support the prospector, Nevada may see a rebirth of the small mine – and boom-town excitement. Such a development would restore some of the drama lost to mining when the industry became a modern science. □



*Eagle Picher's diatomite processing plant at Lovelock. Used in everything from prescription drugs to space capsules, as filters and purifying agents, diatomite is found somewhere in every box of groceries.*

# The Mackay School of Mines

by La Verne Rollin

When the young Irishman with the keen eye arrived on the Comstock Lode in 1859, he dreamed of a fortune –say about $30,000–which would surely take care of his old mother for life. Fifteen years later, when he was making about $300,000 a month, John William Mackay was on his way to founding one of the great fortunes of America. It was one of many made from the glittering gold and silver of Virginia City; it was the only Comstock fortune ever shared by the people of Nevada.

When John Mackay left Virginia City, he carried his name and talents to other business ventures; new Atlantic cables, a telegraph network. He died in 1902 as he was preparing to lay the first cable across the Pacific Ocean. He died, too, before he could realize another dream – a dream of doing something for the state which had given him fame, family, and fortune, and where he had known his greatest happiness.

The Mackay School of Mines at the University of Nevada is the result of that dream. In 1908, as a memorial to the Nevada mining pioneer, his son, Clarence, and his widow, Marie Louise, gave to the University and the State of Nevada a beautiful building, with provisions for the training of future men of mining. It was the first of many gifts to the University from the Mackay family. The Mackay School of Mines today is the education, research, and public service center for the mineral industry of Nevada.

The first class in mining and engineering (and assaying) at the University of Nevada numbered nine. The 1975-76 enrollment at the Mackay School of Mines (including students from 12 foreign nations) was 352, the largest in its history. Over the years, 1,235 degrees have been awarded to young men and women entering career fields of the sciences and professions related to mining and the study of the earth. Training and research now cover mining, metallurgical, chemical, and geological engineering; geology; geography; earth science; geophysics (seismology); geochemistry; and hydrology. The first Ph.D. granted by the University of Nevada went to a Mackay graduate student in geology in 1964.

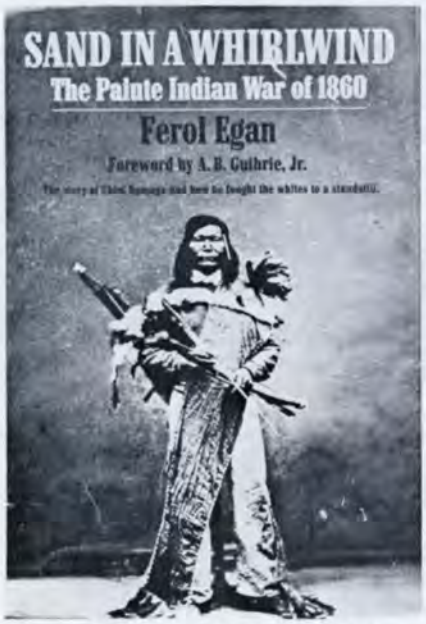
In addition to the Seismological Laboratory, which is primarily supported by government grants, associate organizations under the Mackay School of Mines are the Nevada Bureau of Mines and Geology and the Nevada Mining Analytical Laboratory (the state's two public service divisions). The Bureau and Laboratory perform research, compile information, and make the results of these activities available to the public on Nevada's geology and mineral resources. They include geologic mapping and laboratory studies; geophysical and geochemical surveys; earth-environmental studies; investigations of Nevada mineral commodities and ore deposits; and the exploration, development, mining, processing, utilization, and conservation of metal ores, industrial minerals, fossil and nuclear fuels, geothermal power, and water.

The school also provides extracurricular courses for the public: prospecting, mining law, applied rock mechanics for mining and construction, inplace leaching and solution mining, and a summer institute for secondary science and math teachers on the relationship of the mineral industry to society.

When the Mackay family presented the School of Mines to the University in 1908, they also gave a statue of John Mackay, created by the American sculptor Gutzon Borglum, to stand before it. It portrays a young John Mackay in shirt-sleeves, leaning on a pick, holding some ore, and looking off toward the Comstock Lode – where it all began. □

# Nevada Reading

By Anthony Amaral




## SAND IN A WHIRLWIND

Ferol Egan, Doubleday & Co., Inc., Garden City, New York, $8.95.

Just as Sitting Bull gave his people their greatest triumph at the Little Big Horn (which then led directly to their utter defeat by a concerted military effort of the U.S. Cavalry), so did Chief Numaga of the Paiute Tribe face a similar satisfaction and bitter aftermath.

As the central character in Nevada's one major Indian war in the 1860's, Numaga tried to persuade his people against conflict with the settlers of western Nevada. Circumstances, however, led beyond a point of negotiation. He led his people into a series of brilliant victories, but all for naught. A tragic story, suspensefully told.

## HERE IS OUR VALLEY

Molly Flagg Knudtsen, University of Nevada College of Agriculture, Reno, Nevada, $3.00.

**Here is Our Valley** is the first of the Helen Marye Thomas Memorial Series of books on famous Nevada ranches being published by the College of Agriculture.

Livestock and ranching has long been eclipsed by the more flamboyant industries and it is gratifying that an effort is now underway to present Nevada's ranching history. A good start is Knudtsen's book of reminiscences and history of the ranching country of Grass Valley north of Austin in central Nevada.

Ranching life, assorted characters, love of landscape, cattle and horses, are pleasantly tuned together by Mrs. Knudtsen to show the delights and also the hard times of a ranching life. The woman's point of view comes through as a reflection of life and living.

## OWYHEE TRAILS

Mike Hanley with Ellis Lucia, Caxton, Printers Ltd., Caldwell, Idaho, $7.95.

The Owyhee region is an often bypassed corner where Nevada, Idaho, and Oregon meet. Time moved slowly there and a look of the **Old West** remains evident in the landscape, artifacts and nature's balance. In an earlier day the region pulsed to gold and silver strikes, cattle drives from Texas, wild horses and their inevitable pursuers, Indian conflicts, and the sound of sheep and Basque herders.

Mike Hanley told his story, along with some heard around campfires, to historian Ellis Lucia. The result is a popular history, copiously illustrated, and enticing enough to cause one to head for Owyhee country. The book won the **Wrangler Award** for outstanding non-fiction by the **National Cowboy Hall of Fame** in 1974.

## SARAH WINNEMUCCA

Katherine Gehm, O'Sullivan Woodside & Co., Phoenix, Arizona, $8.95.

This book is subtitled, "The most extraordinary woman of the Paiute Nation." It is an understatement. She was probably the tribe's most exceptional individual, possessing perceptions not unlike those of Chief Joseph.

Sarah Winnemucca, according to the author, did more to make the Paiute's plight known and understood than any other individual in history. The Paiutes, generally more peaceful than the horse-mounted plains warriors, suffered extreme abuses because of their benign nature. Thus their fight for rights and respect called for a courage not necessarily allied to war-making. Sarah Winnemucca was in the forefront in that display of courage. This is an important Nevada biography; refocusing and correcting history of one of the more maligned Indian tribes.






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## Touring

It's an equal opportunity thrill for young and not so young.

# SKI SIERRA

Even before Thanksgiving, thousands of westerners start watching the weather. Hopefully, reports tell of cold fronts out of Canada and the North Pacific. Dark heavy clouds moving into the Sierra give cause for celebration for those who have discovered the pure and simple joys of gliding over white powder.

As temperatures drop far below freezing, sweaters and thermals are unpacked, bindings are inspected and the condition of awkward boots is pondered. And the more mature and portly even submit to a morning routine of deep knee-bends.

Skiing, in its various forms, has given winter a new dimension. It is a sport, a pastime, a cult. But most importantly, it is a rapture that anyone can share. There



Barifot photos







Upson photo

are no limitations as to age, sex and skill. Skiing is an equal opportunity thrill.

Not so many years ago, a ski weekend required travel to some isolated backwoods or to an exclusive spa where fashion precedes sport. Things have changed. So much for the better. New attitudes, new equipment and tailored slopes have brought skiing within the grasp of all who care to partake. The rewards are worth every sore ankle or sunburned face.

If you're a skier now, you already know that the Sierra has plenty of wonderful snow and that there are a score of ski areas within sight of Reno, Lake Tahoe and Carson City. There's even skiing outside Las Vegas. If you're going to ski, there's no better time or place to start. Our listing on page 59 will tell you what to expect.





Anderson photos

# There's style on the slope.

## If you want to save money, sew your own.





What does it take to become a ski-fashion designer? Honor Jones of Reno who founded Donner Designs two and a half years ago explains that her background in 4-H sewing, college anatomy courses and a love for skiing gave her the ideal base to get started.

Mrs. Jones first learned to sew at age 10 in a Carson Valley 4-H club and today heads one of two firms in the country producing patterns for ski wear (the other one is in Portland, Oregon). Last fall she expanded into the "kit" business and now offers, in one package, everything the home seamstress needs to put together a complete outfit, in a choice of colors, at a cost of around $50. A similar ready-made ensemble would run close to $200.

While the kits are available only through mail order, the 17 patterns she has designed are on sale nationally in fabric stores. Patterns come with a number of suggested variations, Mrs. Jones explains, and are multi-sized — that is, because of graduated markings the item can be made in five different sizes, all from the same pattern.

Drafting each pattern involves about three months' work, she said. Preliminary research and experimentation before Donner Designs was officially launched took about a year.

Two teenagers and a husband assist in many ways and, when they have time, the family forms their own best advertising when they appear together on the slopes — in Donner Designs, of course. J Casey

Barifot photo

# Everything you always wanted to know...almost all of it follows.

**D**eep snow, a variety of slopes, conditions, and facilities, all make the Tahoe ski areas among the best in the world. Several of the resorts have been used for both national and international competition – including Heavenly Valley, Alpine Meadows, Sugar Bowl, Squaw Valley, Mt. Rose and Slide Mountain. There's even an excellent slope within minutes of Las Vegas.

For those who prefer cross country skiing, their trips need not be limited to the Tahoe and Mt. Charleston areas. Whether it be in the mountains near Austin, in Ely, Winnemucca or Elko, this outdoor, healthy, family-oriented sport can be enjoyed anywhere there's a few inches of snow. □

**1 ALPINE MEADOWS (916) 583-4232**
Base Altitude–7000; Vertical Drop–1500; Lifts–9 chairs, 1 T-Bar, 3 Poma; Ticket Price–$10; Food; Lodging nearby; Ski Rental. Facilities for beginner, intermediate and advanced.

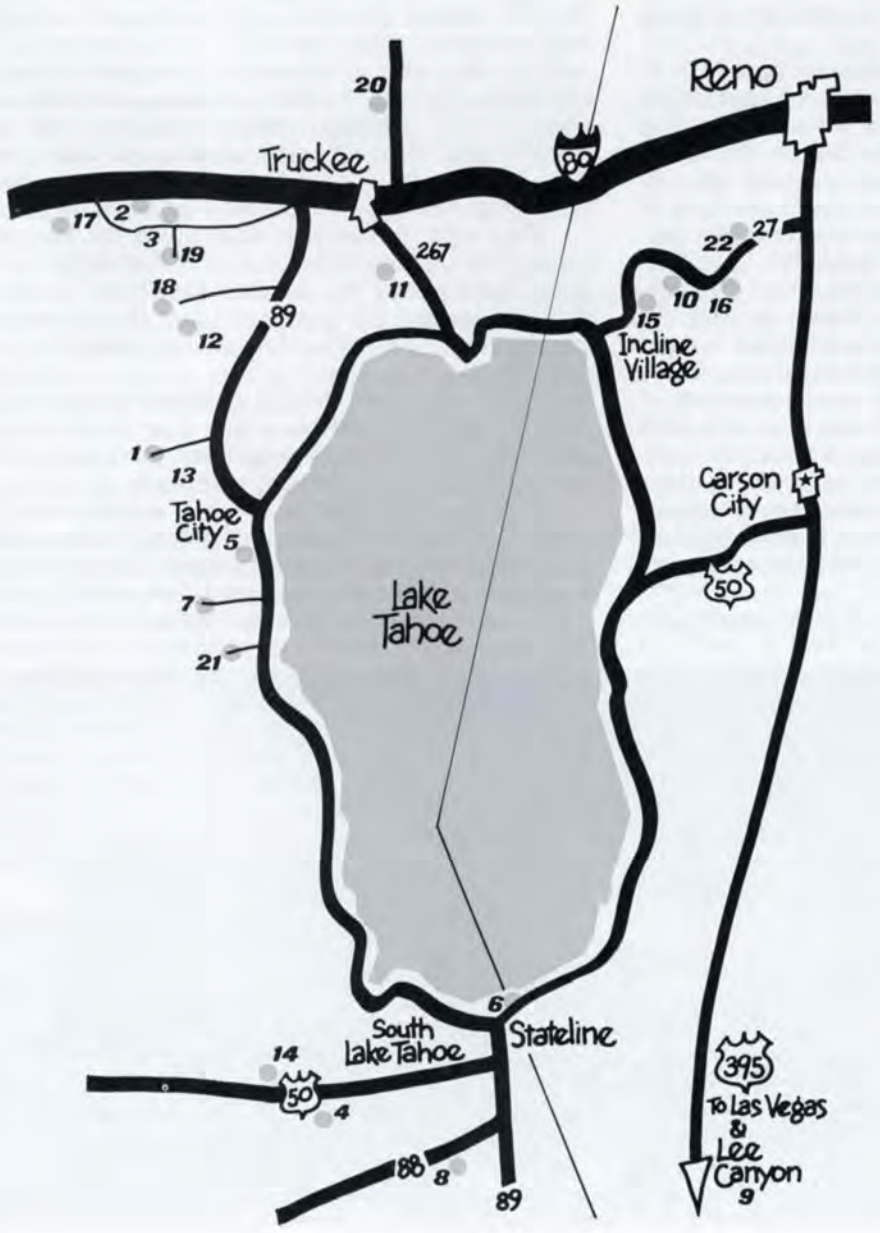
**2 BOREAL RIDGE (916) 426-3666**
Base Altitude–7200; Vertical Drop–600; Lifts–6 chairs, 1 T-bar; Ticket Price–$6 weekday, $7.50 weekend; Ski Rental; Food; Lodging; Night Skiing. Facilities for beginner, intermediate and advanced.

**3 DONNER SKI RANCH (916) 426-3578**
Base Altitude–7135; Vertical Drop–829; Lifts–1 chair, 2 Poma, 1 Rope Tow; Ticket Price–$5 weekday, $7 weekend; Ski Rental; Food; Lodging; Night Skiing. Facilities for beginner, intermediate and advanced.

**4 ECHO SUMMIT–(916) 659-7177**
Base Altitude–7380; Vertical Drop–400; Lifts–4 surface; Ticket Price–$4; Ski Rental; Food. Facilities for beginner and intermediate.

**5 GRANLIBAKKEN (916) 583-9794**
Base Altitude–6300; Vertical Drop–500; Lifts–4 surface; Ticket Price–$4.50; Ski Rental; Food; Lodging nearby. Facilities for beginner and intermediate.

**6 HEAVENLY VALLEY (916) 541-1330**
Base Altitude–6100 Nevada side, 6600 California side; Vertical Drop–4000 Nevada side, 3600 California side; Lifts–14 chairs, 2 Mitey Mites, 2 Poma, 1 T-Bar, 1 Tram; Ticket Price–$10 Nevada side, $11 California side; Ski Rental; Food; Lodging nearby. Facilities for beginner, intermediate and advanced.




**7 HOMEWOOD (916) 525-7256**
Base Altitude–6284; Vertical Drop–1650; Lifts–3 chairs, 1 T-bar, 2 Rope Tows, 1 Mitey Mite, 1 Pony Lift; Ticket Price–$6 weekday, $7 weekend; Ski Rental; Food; Lodging; Night skiing. Facilities for beginners only.

**8 KIRKWOOD (916) 258-8451**
Base Altitude–7800; Vertical Drop–2000; Lifts–6 chairs; Ticket Price–$10; Ski Rental; Food. Facilities for beginner, intermediate and advanced.

**9 LEES CANYON (702) 870-4778 (Las Vegas Area)**
Base Altitude–8500; Vertical Drop–1000; Lifts–1 chair, 1 T-bar, 1 Rope Tow; Ticket Price–$7; Ski Rental; Food. Facilities for beginner, intermediate and advanced.

**10 MT. ROSE (702) 849-0704**
Base Altitude–8260; Vertical Drop–1460; Lifts–2 chairs, 1 T-bar, 1 Poma; Ticket Price–$7 weekdays, $8 weekends; Ski Rental; Food; Day Lodge; Night Skiing. Facilities for beginner, intermediate and advanced.

**11 NORTHSTAR (916) 562-0398**
Base Aititude–6400; Vertical Drop–2200; Lifts–6 chairs; Ticket Price–$10; Ski Rental; Food; Lodging nearby. Facilities for beginner, intermediate.

**12 PAPOOSE PEAK (916) 583-4826**
Base Altitude–6200; Vertical Drop–100; Lifts–6 surface; Ticket Price–$4; Ski Rental; Food; Lodging nearby. Facilities for beginners only.

**13 POWDER BOWL (916) 583-4373**
Base Altitude–6000; Vertical Drop–800; Lifts–3 surface; Ticket Price–$5; Ski Rental; Food; Lodging nearby. Facilities for beginner and intermediate.

**14 SIERRA SKI RANCH (916) 659-7161**
Base Altitude–7350; Vertical Drop–1570; Lifts–5 chairs; Ticket Price–$8; Ski Rental; Food; Day Lodge. Facilities for beginner, intermediate and advanced.

**15 SKI INCLINE (702) 831-1821**
Base Altitude – 6250; Vertical Drop – 1040; Lifts – 19 chairs, 1 Poma, 1 T-bar, 1 Tram; Ticket Price–$10 Nevada side, $11 California side; Ski Rental; Food; Lodging nearby. Facilities for beginner, intermediate and advanced.

**16 SLIDE MOUNTAIN (702) 849-0852**
Base Altitude–8250; Vertical Drop–1500; Lifts–3 chairs, 1 Poma, 1 Pony; Ticket Price–$9; Ski Rental; Food; Day Lodge; Night Skiing. Facilities for beginner, intermediate and advanced.

**17 SODA SPRINGS (916) 426-3626**
Base Altitude–6800; Vertical Drop–650; Lifts–1 chair, 2 surface; Ticket Price–$6; Ski Rental; Food; Lodging nearby. Facilities for beginner and intermediate.

**18 SQUAW VALLEY (916) 583-4211**
Base Altitude–6500; Vertical Drop–2750; Lifts–1 Gondola, 1 Tram, 17 chairs, 5 surface; Ticket Price–$10; Ski Rental; Food; Lodging. Facilities for beginner, intermediate and advanced.

**19 SUGAR BOWL (916) 426-3651**
Base Altitude–7000; Vertical Drop–1500; Lifts–7 chairs and 1 Gondola; Ticket Price–$10; Ski Rental; Food; Lodging. Facilities for beginner, intermediate and advanced.

**20 TAHOE DONNER (916) 587-2551**
Base Altitude–6800, Vertical Drop–530; Lifts–2 chairs, 1 Rope Tow; Ticket Price–$5 weekdays, $7 weekends; Ski Rentals; Food; Lodging. Facilities for beginner, intermediate and advanced.

**21 TAHOE SKI BOWL (916) 525-7479**
Base Altitude–6250; Vertical Drop–750; Lifts–4 chairs, 1 T-bar, 2 Rope Tows; Ticket Price–$4 weekdays, $7.50 weekends; Ski Rentals; Food; Day Lodge. Facilities for beginner, intermediate and advanced.

**22 TANNENBAUM (702) 849-9925**
Base Altitude–6600; Vertical Drop–350; Lifts–1 T-Bar, 1 Pony, 1 Rope Tow; Ticket Price–$5.50; Ski Rental; Food; Day Lodge; Night Skiing. Facilities for beginner and intermediate.

(Prices indicated for tickets are subject to change without notice. Most areas offer reduced rates for weekday skiing; some offer special rates for children.)

was wagered on its tables the first night. Profit was $30,000.

Two years later it was the $5.5 million Sahara with 240 splendid rooms and a sparkling casino. It differed from the Desert Inn in that it ended its first 24 hours more than $50,000 in the red.

"All casinos operate the same for all practical purposes whether it's the Dunes, Riviera, Golden Nugget, Tropicana or Aladdin," said one casino executive. "You allow gaming to be available, and food and booze, and people take advantage of it because they like to do it. It's just that simple."

The saturation point was thought to have been reached in the 1950s, but building and spending didn't stop. Each hotel/casino tried to outdo its neighbors. Not only were there frozen lagoons for ice skating, the biggest pools in America, exotic showgirls, glass outdoor elevators, cabin cruisers on Lake Mead for the use of premium customers, and the most elaborate decor seen anywhere in the world, but the food was unsurpassed and inexpensive. The fabulous shows that brought entertainers to town in 1952 for up to $100,000 a week, cost less than $5 to see.

During this era, everyone wanting an operator's license was carefully checked by the Tax Commission. If an applicant had a conviction within the previous five years his license was automatically denied. He had to show financial stability. No applicants could get a license if they were ever involved in illegal gambling in any other state. Before license was approved, the proposed gambling establishment had to be 75% complete.

With so many new casinos opening up on the Strip, in downtown Vegas and in Reno/Tahoe as well, the 1945 law soon became obsolete. There were two investigators on the Tax Commission who had to cover the entire state, and gambling controls were inadequate. A three-man Gambling Control Board was created in 1955 to enforce the laws and to investigate for the Tax Commission. The Board had authority to grant or deny licenses. It was decided that no more than 50 names could appear on any club's operating license. New investigators were trained to check gambling house records.

The state was tottering on the edge of trouble. Its biggest industry was moving so fast that it could not keep up. Word filtered down that more casinos were linked to syndicate bosses. In 1959 the five-man Nevada Gaming Commission was established with the State Gaming Control Board its audit, investigative and enforcement arm. That same year a black book of "undesirables" was distributed and Nevada casinos became off-limits to them all. If their patronage were accepted, a casino's license could be revoked.

The state's chief executive was given more power when the legislature created the Gaming Policy Board in 1961. The governor acted as chairman of a board which included members from the Control Board and the Commission.

In more recent years, individual ownership of casinos has become practically impossible due to rising costs. To continue growth, and build more revenue for the state, licensing had to be extended to include publicly traded corporations. At first everyone in the corporation had to be cleared for the license but control was impossible so the law was changed to allow clearance of controlling stockholders only.

The Del Webb Corporation bought the Sahara and Mint on the Strip and the Primadonna Club in Reno. The Hilton Corporation bought the International Hotel in 1969, renamed it Las Vegas Hilton, and it has since become the largest resort hotel in the world. It has an enormous casino, 2,139 rooms, 30 stories, many fine dining rooms, two large showrooms including one that seats 1,750 people. Cost of the Las Vegas Hilton, with the new additions, totaled $80 million. The Hilton Corporation also owns the Flamingo.

Many other large holders of casino interests are not publicly traded. Howard Hughes has invested $100 million in Nevada casinos, including the Desert Inn, Frontier and Sands in the south, and Harolds Club in the north. The San Diego based Argent Corporation recently acquired the Stardust, Hacienda, and the Fremont.

But that's not all there is. The luxurious Caesars Palace and the MGM Grand Hotel leave nothing for patrons to want. The MGM Grand has all the games (including craps, 21, baccarat, keno, poker, slots), 2,084 rooms, a huge shopping arcade, a movie theater showing nostalgic films and a jai alai fronton. The Grand was completed in 1972 and cost $120 million.

**The Territorial Enterprise** resumed publication in Virginia City in 1952 after a lapse of many years. In an article written about the Strip, one editor said, "The casinos obviously and frankly make their living from the guests. The guests admire the caviar and champagne and pay for it painlessly and the state gets a cut on the overall take. It is Nevada's unmitigated good fortune that no other state in the Union has the horse sense to imitate our own superlative and satisfactory way of life."

Since 1971 the Gaming Policy Board has become the Gaming Policy Committee. It is still chaired by the governor but includes one member each from the Gaming Commission and the Gaming Control Board, two members from the general public, and two from the gaming industry.

There are over 49,000 slot machines in Nevada, 2,600 table games and 1,199 licenses in force. Approximately 22 million tourists visit Nevada each year, many of them on special gaming junkets or tour buses.

"Certain people have a knack of making money because they can see things, feel things, realize things," said the controller of a major casino. "People are going to gamble and Nevada has grown because of it. Harold Smith saw it and moved from Playland at the Beach in San Francisco to Reno because he knew it was going to be a success. Harvey Gross saw the same thing and opened a club at Lake Tahoe and Sam Boyd and Jackie Gaughn followed suit in the south. Bill Harrah knew it too. He turned a bingo game into an $80 million enterprise. People want to gamble. These are the guys who let them do it."

Taxes received from the gaming industry in 1974 totalled $93 million. Gross receipts (all winings minus all losses) exceeded one billion dollars.

State tax revenue from gambling is lower in Nevada than in five other states – New York, California, Florida, Illinois and New Jersey – which get most of their taxes from pari-mutuel betting. Gaming tax supplies 50% of Nevada's General Fund. Counting indirect expenditures (taxes for gasoline, cigarettes, liquor, etc.) gaming pays for about 80% of the state's total budget.

Nevada is sixth in size in the Union. Its gaming is open, flamboyant, controlled. What makes up Nevada will never be found in Paris, Rome, nor Dubuque. The state has no tradition, just a hot dusty history of making its own rules. □

# Warehousing

## It's big business. Space for warehousing in northern Nevada would cover the cities of Reno and Sparks. By Glenda James

Still in its infancy compared to Nevada's other major industries, warehousing has a potential which has just begun to emerge. Growth the past two years has been spectacular with over two and a half million square feet of space added in the Reno-Sparks area and at least three-quarters of a million square feet in the Las Vegas area.

The concept of a free port law to attract the warehousing industry to northern Nevada was originated by the late Edwin Bender who was already in the business at the time. With the backing of the Reno Chamber of Commerce, legislation was enacted in 1949.

When the law was made part of the constitution in 1960 major firms began to look to Reno as a western states distributing center. Between that time and 1966 some 2,000 industry-zoned acres were filled in Reno-Sparks with about three million square feet of warehousing space. There is now over eight million square feet – enough to put a roof over the entire downtown sections of the two cities.

Las Vegas, a little slower getting started, is showing promise of becoming as important in warehousing in southern Nevada as Reno-Sparks is in the north. All of the same advantages apply with the extra bonus of proximity to several million Southern California consumers who can be reached with a five-hour truck trip.

Over 250 national firms have chosen the Reno-Sparks area for their western distribution centers and have found that the desirable tax base is only one of several important advantages. Ideally located to serve the 11 western states, the area is known throughout the country as the Hub of the West. Overnight service is possible to over half of the 40 million western population and any strategic point can be reached within 1,100 miles.

Nevada's transportation network adds to the ease of deliveries with over 4,000 miles of improved highways, 1,635 miles of rail lines, and fast service by three airlines. Rates are competitive with excellent transportation facilities including an ample number of motor carriers, freight forwarders, railroads and Air Express. Add to all this Nevada's mild climate and nearly pollution-free atmosphere and you have a package which continues to attract investors from all over the world.

Las Vegas' accelerated warehousing activities are evident in new facilities like that being constructed by Marshall Ward and Company of San Francisco with 180,000 square feet, 80,000 of that to be occupied by J. C. Penney Company. Eggerton, Germeshausen and Greer is constructing 300,000 square feet and other firms are looking to expansion.

J. C. Penney Company, in addition to the Las Vegas facility, has plans for 1.5 million square feet in Reno for a catalog distribution center and warehouse to serve 350 stores and to employ up to 2,400 people. Total employment currently in the industry in Reno has been estimated at near 8,000.

Leaders in the field are highly optimistic about the future. Said Frank Bender, of Bender Warehouse Co., "The area is growing. It has become the largest single distribution center for the West Coast with more national firms distributing from Reno than any other location. With less inventory they can serve a larger market because by centralizing and having one distribution center they can have less inventory and serve a bigger market. I think it will continue to grow."

John Dermody, Reno Industrial Land Developer, said, "Thirty eight states have free port laws and inducements, but we are the envy of the whole nation." □



**Riding with Hank Monk**
continued from page 22

Twice had horses been changed since the race began. We had passed the other stages with a wild hurrah, coupled with Hank's jeers of derision; and the big animals jumped their length each time they threw their feet forward, gaining, steadily gaining – at every spring. Still was he urging them on. The pace was terrific for any but the best of roads – which this one was not; here it was the maddest of reckless daring to attempt it. No one thought of that now; for the spirit that had possession of all – the gambler's chance to win (or lose) dominated each one of us. To win! To be first in at the finish! The disregard of life and limb – the taking chances with death – it was all forgotten.

We were going like the wind when, without warning, we (horses, sleigh, passengers, driver and all), were flung into a tangled heap at the edge of the road, by the breaking of the tongue. But, Heaven be praised! it was at the upper edge. Hank had shot head-first into the soft snow, never losing his grip for one instant on the reins; and before the floundering horses could make the mishap worse, he had been dragged out by the passengers who had topped the heap and were unaffected by the spill, and – though dazed a bit for a few minutes – in a marvelously short time he had straightened out the tangle, and spliced the broken tongue with short bits of rope, which, however, looked none too strong for safety. We were not yet back in our places when the rival stages and the fast freight wagon (racing, too) – exulting in our mishap – went by with whoops that would put an Indian on the war-path to shame, and we felt that the race was lost. We did not greatly care; for the little accident had brought us back to a world of realities, and we noted how far it was down to the bottom of the canyon. Our blood was cooling, and with it our ardor for racing along grades. "Go slower, Hank!" all cautioned him.

He shook his old head. "Why, I broke that pole on purpose, so I could fix a jint in the middle; it'll turn sharp corners quicker." Importunities were of no avail. And, like Gilpin, away we went again; the "jint" working much better than might be expected. Or, it might have been we were too much occupied in keeping our seats to note precisely how it worked.

Faster than ever, now, went the team down the slopes of the Sierra Nevada; and Hank shouted, and whipped, and swore his six whirlwinds into a fury of speed. Past our rivals we dashed, as we came down into the valley; and – in spite of delay and the broken tongue (or perhaps because of it), with the great Hank Monk driving them as no other stagedriver ever did or could guide horses – the six big bays were first in at the finish when we drew up in front of the Carson City stage office.

Stories of Hank Monk's driving are many; and these have grown threadbare with the telling. Yet there is no one who ever rode with him as he sent his horses on a run with that unerring precision which was surely a gift of the gods, but that recalls the old golden days with a longing for their realization again, and all it once stood for. To once more know the old delight that was half-akin to fear, when he sent his team along under the singing of the lash, up and down the roads of the Sierra!

The old stages are rotting by the roadside; and the old ways, and old days are forever gone. And Hank – Hank Monk (peerless, incomparable) lies at the end of the run, in the graveyard at Carson City. □

**"I am the eagle"**
continued from page 34

simulator, and wing breakage fee. For their four-hour actual flying session they provide gliders, helmets, knee pads, gloves and instructors. For three or four people per session, and a trip to a nice little hill, the cost is $34 per person.

In the Reno area there's always a mountain to take off from, always a landing space to settle on, and you can always fly regardless of wind direction. "Most of the mountains in Nevada have air variances which are really different," says Sheehan. "It's great for hang gliding, perhaps the greatest place in the world. The high altitude causes the winds to sometimes come out of the south at the top of a hill but from the north at the bottom. Flying in the mountains takes a lot more thought than flying anywhere else and there are more possibilities for special maneuvers. Sometimes it's harder flying, but that only makes it better."

Competition has recently become a factor in the sport of hang gliding and meets are being set up all across the country, and in Canada. There will be a World Cup meet in Europe next year where 60 of America's best pilots (five from each of twelve regions) will compete using standard rogallos against the best in the world. Some wings for competition are a little different from normal rogallos, being longer, narrower, and having truncated wing tips and stabilizers. They are harder to fly, less stable than standard wings, but are capable of longer, more complex excursions. Competitive flights are judged by duration, safe flight maneuvers, and the pilot's ability to land on a designated spot.

Steve Sheehan is a champion golfer and skier as well as being one of the best hang glider pilots in the West. Ken Kuklewski used to be a surfer, mountain climber, motorcycle rider. He does everything well. "Flying is different from anything else we've done. The longer the flight, the better it is. When you've got the right wind and the right hill – depending on how strong your wind and how steep your hill – it will determine whether or not you can soar. Soaring is just prolonged suspended flight, staying in the upcurrents of air on a ridge or just soaring back and forth like a hawk, gaining altitude and just follow the ridge down. You are always in total control of you own destiny."

Ridge soaring in high winds demands serious dedication and practice. The competent fliers in hang gliding are those who prepare each venture in advance and never depend on chance. "Hang gliding is really peaceful, total freedom, and I'm pretty much hooked," says Ken Kuklewski. "It's probably the best thing I've ever done it's a race with sex for me." □

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