* Evidence Relating to Geographic Features

Climate History:

To establish Seiad Valley as climatelogically acceptable for Vitaculture, weather data began to be documented on a daily basis in 1991. Two minimum/maximum thermometers were used to record high and low temperatures. "Grape Growing and Wine Making" by David Jackson and Danny Schuster was used as a guide and perminant recordings were made on page 32 (attatched) (B) at seasons end to document compiled findings of Heat Units. Attatched calculation (A) sheet shows totals for the 1986 year. A calendar exists for each year from 1982 to the present with recorded temperatures, rainfall amounts, wind and weather conditions.

It was determined from the beginning that there were sufficient Heat Units for grapes to ripen due to the abundant table grapes locally grown. Heat units were calculated using the formula: Total daily high temperatures, divide by number of days of month. Total daily low temperatures, divide by number of days of month. Add the two results togather, divide by two, subtract 50 and multiply by the number of days per month to obtain that months total heat units.

Seiad has averaged 2230 heat units and compares with Montery, Ca and Rheinpfalz, Germany. I considered Seiad to be a region I, the Extension agent in Yreka for the University of California thought I was borderline. (attatched) (D)

Frost protection was of paramount importance. Test plots of 100 vines each of Pinot Noir, Chardonnay, and Gewurtztraminer were rooted and planted on a south facing sloped hillside. Bare ground cultivation was used to promote air drainage. 100 white riesling were planted on the leveled rock piles due to a callout in "Grape Growing and Wine Making" for the rieslings preferance for gravely soils.

A minimum/maximum thermometer was installed on one post on the rocks. Another min/max thermometer was installed at the house. By comparing temperatures over the season on a daily basis I was alerted to the difference the rocks made. Temperatures were warmer on the rocks when it was cold in the air and on the soil. When the heat of summer came it was actually cooler on the rocks than on surrounding soils. Thus it was learned that the rocks were the moderating element causing a micro-climate greatly different from the nearby fields. Furthermore, the porosity of the rocks allow a humidity difference

which also aids in frost protection. This fact is documented by the pinot noir, chardonnay and Gewurtztraminer which remain shrub like and in 8 years have never produced a single berry. Frost protection in the planted site will allow a crop to form and then develop.

Currently, other sites around the valley are being monitered, three of which have pinot noir planted, to test air drainage, soil and growing conditions and allow determination of which region I varities to grow. The inclusion of all the privately owned land in the Seiad Valley vitaculture area is being thus sought.

Site selection is primary to vitaculture. The pinot noir has a traditional quality in France and Oregon as "Growing best on red soils". Seiad Valley is blessed with deep, fertile, iron rich soil skirting the surrounding sloped mountain bases. Sandy valley floor soils would provide nicely for the chardonnay and gewurtztraminer. The potential for this small valley to become an economic area independant of logging and reduce the impact on the surrounding National Forest is enormous.

Land owners have watched in disbelief the transformation of a useless pile of rocks into a producing, contributing piece of fertile land without the use of a single chemical. Surrounded by 5000 foot mountains covered by protected old growth, fed by waters from the Klamath River, Seiad and Grider Creeks, Seiad Valley is its own micro climate area where in winter as little as a mile away in either direction it can be raining or snowing.

Soil Compositions:

The soils have more diverse precious metals in suspension than anywhere else. Included but not limited to gold, silver, copper, iron, chromium, molybdenum, titanium and magnesium. Throw in some jade, quartz and serpentinite and imagine what qualities adept, poetic wine writers will be able to call on to describe the flavors unique to this gravely area. To quote from "A geographic Appreciation" by Harm Jan De Blij, "...It is one of the apparent anomalies of vitaculture that certain of the worlds greatest wines are produced from grapes of vines that stand in soils that would, for other agricultural purposes, be described as "poor" at best. ... unexplained suprises still exist."

The Rock piles in Seiad Valley certainly suprised me, let alone any other human being that has walked out there. The grape vines were established enough in 1986 to never need watering again. 1987 began 7 years of drought and Seiad recieved only half of normal rainfall. Thru this time seeds falling to the rocks have sprouted on their own and continue to grow without mans help. The word "estate" is defined as a persons entire property and possessions. Estate was once used by wine producers making wine from vineyards they could see from their winery and on ground that they owned. In Seiad the vines are creating their own "estate" and certainly qualify for the establishment of the defined area submitted as an appellation of origin.

County: Siskiyou
Elevation: 1371 feet
Region I, Heat Units: 2230 average for growing season, Apr to Sept.
Rainfall: 54 inches average,
Snowfall amount at any one time: 11 inches
Soils: Gravels, Sands, Loam, Red and Gray Clays. (See attatched)

NARRATIVE OF BOUNDARY Seiad Valley
Seiad Valley Quadrangle California-Siskiyou Co. U.S.G.S.
Scale 1:24000

1. At mile 130 on the Klamath River find the 1600' contour line on the North slope above the riverbank. Follow the 1600' contour line in a N.E. direction to Canyon Creek.

2. At a point North of the end of the unimproved road cross Canyon Creek and rise to the 1800' contour line, then continue N.E. along that line to Sawmill Gulch.

3. At the point where the road crosses Sawmill Gulch proceed due South, then S.W., then S.S.E. along the 1800' contour line to point

4. where the line turns East above the Klamath River. From this point on the 1800' line follow a straight line S.S.E. across the Klamath River to a point

5. on the 1600' contour line located on the N.N.W. slope. Proceed in a S.W. direction following the 1600' contour line to a point

6. on the N.W. slope above the road and bridge that crosses Grider Creek. Cross Grider Creek on a straight line in a N.W. direction to point

7. on the 1600' contour line on the S.E. slope above Grider Creek. Proceed in a Northerly direction along the 1600' contour line to a point

8. located on the North slope above the Klamath River where the contour line turns West. From this point cross the river in a N.N.E direction with a straight line back to the point of beginning.

Estimate of Acreage = 2163 Acres

Estimate of Acreage planted to grapes = 2.5
Commercial Growers of crops = 10 acres of Alfalfa / 1.5 acre grapes
No other Commercial growers or Wineries in area.

SEIAD VALLEY
VINEYARDS
P. O. Box 521
45013 HWY 96
Seiad Valley, Ca. 96086

7 April 1993

Robert White
Bureau of Alcohol, Tobacco and Firearms
Washington, D.C. 20226

Dear Mr. White,

This is a petition to request that Seiad Valley, California be designated a U.S. Vitacultural area. Boundaries are as marked on the enclosed U.S. Geological Survey map, SW/4 Seiad Valley Quadrangle 15' 1980.

The economic importance to the people in this Valley of such a designation would be truly beneficial and practical.

Thank you for your consideration.

Respectfully,

Brian O. Helsaple

Brian J. Helsaple, Owner Bonded Winery CA 5633
[redacted]

Evidence of Local / National Familiarity as to Vitaculture

Upon my success with the Vines surviving on the rocks I wrote an article explaining the methods in hopes of getting published in a national magazine. On 11, Dec. 1986 I mailed drafts of the attatched (A) "What to do with 20 acres of rocks" article to Mother Earth News, Farmstead, Organic Gardening and Sunset magazines. All returned the article as being too long or too limited in appeal to the readers. The article was sent to the local Supersaver and thus resulted in the first public notice that Seiad was Vitaculture potential.

1. "White Riesling on the Rocks" Emilie Frank, 'Supersaver' Sept 17, 1986
2. Vincent Petrucci, Director, Vitaculture & Enology Research Center, Calif. State University, Fresno. Walked the vineyard and was given a 35mm slide of the vines on the rocks to use in his lectures to demonstrate Siskiyou Counties Vitaculture potential. Oct 21, 1990
3. Prospectus written for Realtors on the Klamath River. Apr, 1991
4. "Helsaple plans winery in Seiad Valley" Marcia Armstrong, 'Siskiyou Daily News' June, 1991
5. Follow up letter by Vincent Petrucci recognizing Seiad Valley Vineyards. May 7, 1992. Noteworthy because ground had not been broken for the Winery.
6. Siskiyou County Adventurers Published Quarterly for tourists to promote the Rivers potential by Northern Klamath River Chamber of Commerce. Not solicited nor was I a Member of the Chamber! Aug 92
7. "Rock-pile grapevines suprising all experts" Gary Mortenson 'Pioneer Press' Sept 16, 1992
8. "Timber Country Tries to Cut Losses" Michasi McCabe, 'S.F. Chronicle, Mar 15, 1993
9. Wild and Scenic Klamath River Brochure Jointly produced flyer by the Klamath River and Happy Camp Chaimbers of Commerce to be distributed at trade shows and businesses thru out Calif. Completion date: Mid April, 1993 Cover and description of points of intrest will be printed on reverse side. Comp not available this date

(A)

What to do with 20 acres of rocks

The search for Gold progressed from simple pan and sluce box to mountain eroding hydraulic mining. Its not too hard to believe that land could be leased or sold to make money. What is difficult to imagine is the land being raped for its Gold, then left in its upturned condition. Some say that the Dredge that dug 10 to 20 feet of soil to reach the ancient river bed, uncovered only 20% of the Gold along with other precious metals. Piles of rounded rocks called tailings leave a trail where the Dredge worked, the soil vanished. Until the year 1941, Seiad Valley, in Siskiyou County, Northern California, existed as farming land with the Klamath River along its south side and Seiad Creek winding thru its middle. Surrounded by forests of Pine, Fir and Cedar, the soil of the Valley floor provided rich nutrients for potato crops, corn and wheat fields, apple and pear orchards, to name a few.

The Dredge destroyed over one fifth of the Valley floor. Bull Pine, Cottonwood, Willow trees and Blackberry Vines grew up from the deep pits. A few weeds found particles of soil to sprout in but the fertility of a rock pile is small.

The Dredge was moved out of the Valley after it had done its work. Some of the properties it had been on were divided into saleable parcels, part dirt part rock. My brother and I purchased a 40 acre parcel that included 20 acres of undisturbed ground with 4 houses and 20 acres of tailings. The houses were rented to Forest Service workers and Loggers. The ground could be put into crops, but what could be done to the tailings?

Blackberries grow prolifically in this Valley and would cover every square foot of ground if allowed to. They could be trained and would produce an excellent crop year after year. There would be the problem of distribution to the markets and the painful tolerance of thorns whenever working with the vines. I spent 1982 clearing out blackberry vines, building a house and discovering an abundance of wild grapevines along the river. It was a great year for wild grapes. Spring began early and fall temperatures were warm enough to provide a sugar content of 18 degrees Brix. Wine growers prefer 20 degrees for adequate fermentation. I had made Blackberry wine so it was natural to try wild grapes. In searching for the correct steps to follow to make grape wine I found a German wine book that showed White Riesling vines growing on the mountain slopes overlooking the Mosel River. The mountain is shale which is a rock, so why not plant grapes on the rocks here? After an estimate of the yearly high and low temperatures for the growing season here, the valley seemed to be a region I with 1400 degree days. After taking daily high and low readings for the past 3 years it has varied from 1840 to 2680 degree days which makes the valley a region II, almost.

The first step was to try a test plot to see how the individual varities would grow. Pinot Noir, Chardonnay, Gewurztraminer and White Riesling were chosen and cuttings were acquired from Oregon vineyards. California sells certified cuttings grafted onto Phylloxera resistant rootstocks, some for as low as 85 cents. Since this is a Phylloxera free area it was decided to use non-grafted cuttings. The Oregon

cuttings numbered 400 and were purchased in February 1983 for 15 cents each. Placed in a sand and sawdust mixture they began to callous. On May 10 the cuttings showed bud growth and were placed in a nursery. Spaced three inches apart in 4 rows, covered with plactic to provide shade, the cuttings took off. Watered at 10,day intervals, some of the arms reached 4 foot lengths, even after being pruned in mid summer. The only trouble came from loseing water to an ambitious gopher or mole who repeatedly burrowed down each row but never touched a root.

Fall of 83 came and leaves reluctantly turned rusty brown. The vision of this occuring in a real vineyard in front of the house was overwhelming, but would the grapes grow on the rocks? With the first rain the rocks were soaked enough to keep the dust down so work commenced in pushing the piles into the holes to make the rocks flat. What seemed like months of repeatedly going back and forth on the old 1937 D7 cable dozer actually took only 62 hours to complete 4 acres. More time was spent repairing the old dozer than working it.

I determined by reading about the characteristics of the White Riesling that it should go on the rocks. Pinot Noir, Gewurztraminer and Chardonnay would be planted on a south facing sloping hillside in the dirt. 300 holes were dug with a clam post hole digger then transplanting began. The cuttings were in soil made from years of decayed willow leaves. The digging was very easy and most of the roots pulled easily from the dirt. The number, length and diameter of the roots was more than expected. The roots were immediatly cut back to within 4 inches of the cutting and it was placed in a 5 gallon water and B-1 mixture. After 15 rootings were dug it was off to the vineyard. 2 cloudy days and 300 rootings later the easy part was done. The rocks proved to be another challenge. Holes were dug with a bent 3 fingered fork on hands and knees as close to the knot in the planting string as permitted. Large rocks were encountered quite often but evidence of dirt-sand mixture, from the eroding rocks, was plentiful. It rained while digging and the work became easier as the rocks didn't fall back into the hole so easy. Digging was also done with a hoe until a large rock was encountered. The holes were 14 inches deep and the vines transplanted as before but with the addition of 3 shovels of a peat mixture which provided the roots a new start. Rocks were pulled around the stem with 2 buds exposed, leaving no appearance of soil.

Spring of 84 arrived, grape buds appeared and later so did a late spring frost. It crippled the Pinot Noir, Gewurztraminer and Chardonnay but not the White Riesling. I assumed that the rocks gave off just enough heat to protect the little buds so close to the ground. The healthiest bud was allowed to reach for the sky, all others were constantly removed as well as the clusters of grapes that formed. The Vines on the soil however, had to start over again with their secondary bud and thus were 2 weeks behind the White Riesling.

Posts were cut from Cedar trees on the property and were put by White Riesling first. Again holes had to be dug with the 3 fingered fork and by June 3rd the Riesling vines were 30 inches long and tied twice to their posts. Since it seemed hotter on the rocks and there might be less water storage, I watered them with a rainbird for 12 hours every 10 days. The vines on the soil were watered only 3

times the whole season, they showed slow growth by their close bud spacing but a few did manage to reach 3 foot heights. Almost all the Riesling topped 5 feet and were then cut back to form heads at 40 inches. By the fall I discovered that one vine had formed a 4 foot arm. Internode spacing was an average of 4 inches and trunks were nice and thick.

Again the vines turned brown and went to sleep for the winter. November rains soaked the ground but ceased from December till April. It was colder, longer, than the winter before. There was a two week hot spell in early March that woke the fruit trees. On March 25th and 26th the Valley recieved 20 inches of snow that burried everything and crushed the Blackberry vines. The grapes slept through it all and by April 8th the buds began to swell. After a week of growth each trunk had 16 to 20 clusters of grapes forming. Everything was removed on the trunk except for the top 2 or 3 growing arms, which will form next years crop. In May the temperature dropped to 24 degrees for 4 nights. The vines on the soil were frozen solid thru their trunks and had to start growing again from underground protected buds. I looked for the same thing to happen to the Riesling on the rocks but they seemed untouched. A few clusters had been retained to make experimental wine with and I waited for them to fall off, they kept on growing. The new arms went right on climbing the post and receiving lots of sunlight to insure a good crop for the following year. Their future in the winter will be to be tied looped down to the post and bear a crop then to be cut off and replaced with another arm.

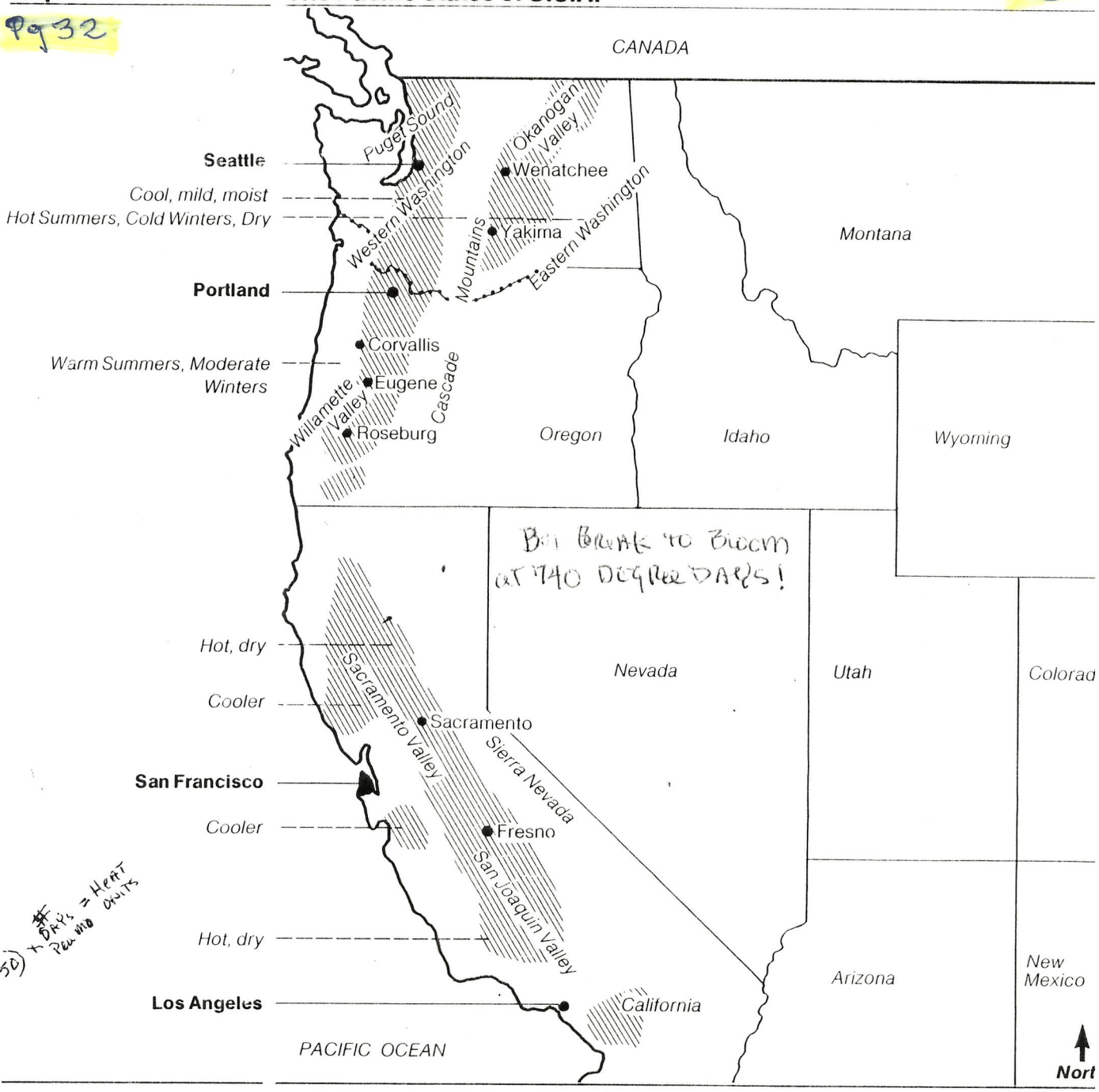
The summer of 85 turned out to be intense with heat, though a 5 degree lower temperature was recorded over the rocks than the surrounding soil. Pinot Noir, Gewurztraminer and Chardonnay struggled against deer brousing in trying to climb their posts. Several posts rotted off and fell, none did on the rocks. The White Riesling happily went about matureing its crop of grapes which started to sweeten in mid August. Sugar levels were reached quickly but acid remained at the bitter 1.2 level for weeks. Ideal level is 0.7. Late September some grapes began to shrivel and even though there had been some earlier rain, the grapes didn't rot. The night before I decided to pick the grapes I had tasted and nursed along, the deer could resist no longer and raided the vineyard. Shriveled as well as perfect clusters were entirely removed, not a drop was left to test or experiment with.

On October 10th the temperature dropped to 20 degrees and a hard frost took the vines on the soil as well as the 1000 cuttings in the nursery. Their Leaves, like those of the tomato and squash turned crispy brown in one day. To my amazement and delight, the White Riesling began to change slowly as the mature Oak and Maple trees did. The sun shone golden yellow through their leaves as they were put to sleep for the winter. The rocks were again working their magic as they had those 4 days in May, Somehow the rocks had allowed the Riesling with foot long arms and forming crop to continue unharmed. Frost damage is supposed to occur at or below 30 degrees and with no frost protection the Riesling had survived and provided a crop as well. A further benefit, as if frost protection wasn't enough, is the weed free ground over the site which avoids the use of all tillage or herbacides!

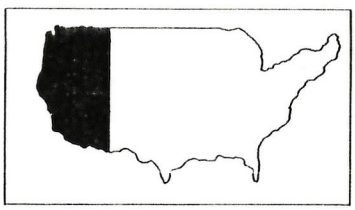
When once again the rocks are slippery with rain work will begin flattening more tailings to make a place for the 1000 cuttings sleeping in the nursery. Eventually a lush, wine producing vineyard will stand where once tailings littered the surface. Below these 20 acres of rocks will be the roots of vines searching for water and nutrients to send to the grape. Roots that lay next to the gold that the Dredge missed. Its not hard to imagine the unique flavor of wine that the plump grapes, ripened by sun and protected by rock, will produce.

The author is a 40 year old designer and builder of anything practical and impractical. This includes all the implements for his 1937 Ford 9N tractor as well as the screen printing equipment used in his business. By profession he is a Technical illustrator, commercial artist and printer of items that don't move. His latest spare time project is building an airplane. He's also a good cook.

Map 6 The Pacific States of U.S.A.



The shaded areas (above) show established and potential viticultural areas.



(C.)

86'

APR	MAY	JUN	JUL	AUG	SEPT
26 62	30 70	54 104	46 97	46 101	42 90
23 70	36 58	55 97	46 90	42 97	45 96
27 64	36 60	44 100	45 88	49 98	46 104
29 74	33 65	43 86	42 78	50 98	49 103
31 82	34 53	46 82	34 85	44 102	47 100
37 79	28 57	47 78	46 90	50 101	43 97
44 70	31 66	42 78	42 90	50 100	42 93
34 76	30 68	34 84	40 89	48 104	40 80
32 70	29 72	34 84	~~40 87 6~~	48 102	33 77
27 65	31 59	38 100	40 87 6	50 102	32 86
32 51	24 68	38 98	40 87 6	46 96	36 87
25 60	26 80	38 101	40 85 6	46 96	39 87
29 62	35 72	40 87	40 86 6	48 102	30 72
36 55	29 75	46 77	40 87 6	48 105	38 69
34 56	27 76	44 80	40 89	50 99	42 62
30 60	32 86	49 78	36 93	50 94	40 62
25 72	34 92	45 72	43 78	50 95	40 62
30 82	38 86	41 71	36 84	45 94	42 58
35 94	38 80	32 80	42 86	40 98	38 66
41 90	46 68	37 84	43 100	40 100	42 72
42 70	29 58	38 85	48 100	45 97	36 78
26 60	26 78	42 102	48 102	44 91	34 80
22 54	40 80	49 102	43 102	46 95	34 70
34 56	37 85	54 101	42 99	40 94	35 54
22 54	45 90	50 100	40 95	45 98	35 50
45 62	51 87	43 98	41 92	44 97	38 50
37 64	38 90	44 90	42 88	48 97	32 60
27 67	44 96	41 86	43 96	42 86	34 77
25 76	48 97	40 82	44 90	42 83	31 70
	48 103	44 95	44 92	40 86	38 72
	52 104	~~46 91~~	42 99	41 92	40 60
			46 100		
907 1959	1108 2324	1301 2662	1304 2824	1425 3000	1158 2282

APR: ÷29; 31.3 67.5; ÷2 ~~30~~ = 49.4; = 0; B – 50 × Days = D.D

MAY: 31; 35.7 75.0; 55.3; = 6.35; 165.8

JUN: 30; 43.4 88.7; ÷2; 16.05 × 30; 481.5

JUL: 42 31 91.1; 531.

AUG: 31; 45.8 96.77; 65.88

SEPT: 37.3 73.6 ÷ 2 = 55.5; 5.5; × 170; = 1837. dd; 170; 2007

COOPERATIVE EXTENSION
UNIVERSITY OF CALIFORNIA
SISKIYOU COUNTY

1655 South Main Street
YREKA, CALIFORNIA 96097

Telephone:
916 842-2711

(D)

December 10, 1982

Mr. Brian Hesapple
[redacted]
Seiad Valley, CA 96086

article SENT TO AMAND & ROGER ON 28 MAR 86

Dear Brian:

I talked with our viticulture specialist, Amand Kasimatis at Davis about your questions.

He is sending me a list of nurseries so you can contact them for the variety that you want.

You do not need to use a specific root stock.

Phylloxera disease is brought in on root stocks that have soil on them.

Plant certified stock so you can be sure it is virus free.

Varieties: Gray Riesling, White Riesling, Chardonnay, Gewürztraminer should work if your season is long enough.

You may be borderline.

Sincerely,

Roger W. Benton
Farm Advisor

RWB/hs

address for AMAND
Dept of Viticulture & Enology
~~U.C.~~
U.C. DAVIS, CA.
95616

II. ENVIRONMENTAL SETTING

A. Geology

Regional geology of the Klamath River Province has been divided into four distinct lithic belts which extend in a north-south direction. Seiad Valley lies within the Western Paleozoic and Triassic belt. A detailed description of the Seiad Valley area was obtained from the work of Dr. Levi G. Medaris, Jr. (1966) who wrote an extensive doctoral dissertation on the mode of origin of alpine periodotite, as well as its history subsequent to initial crystallization. All of the information presented in this report was extracted from his work entitled, "Geology of the Seiad Valley Area, Siskiyou County, California, and Petrology of the Seiad Ultramafic Complex."

According to the geologic map of Seiad Valley and the airport site, the valley floor and airport site are mostly alluvium deposits which were widely dredged and hydraulically mined for gold. Chromite was also mined within the Seiad Valley area.

The rising terrain on the north side of Seiad Valley is composed of metamorphic rocks, principally epidote amphibolite. Both igneous and metamorphic rocks have been identified on the south slopes of the valley. The upper reaches of the south slopes are composed of biotite amphibolite, which gradually transitions to areas of metavolcanic basalt and andesite. Greenschist is located at the extreme upper end of the south slope. The airport site consists of sedimentary alluvium, which is generally surrounded by igneous rock slopes of biotite granite, quartz monzonite, and alaskite to the north and the south slopes adjacent to the Klamath River.

A fault has been identified within the valley extending generally along

Additional evidence relating the use of the name "Seiad Valley" to describe the northern portion of the proposed vitaculture area also links the southern portion. The SISKIYOU PIONEER is an annual book that is published by the Siskiyou County Historical Society and informes the reader of historical accounts and events associated with the county.

Siskiyou Pioneer 1957, Vol 2 #10 enclosure (A) states that "Seiad was originally spelled "Sciad" and was an Indian name meaning "Peaceful Valley". The creek that runs thru Sciad Valley bears the same name and was known to the trappers and prospectors in 1850."

Siskiyou Pioneer 1966, Vol 3 #9 enclosure (B) states that in 1871 Charles Bailey and Ann Wood had a small store "at Seiad".

Siskiyou Pioneer 1966, Vol 3 #9 enclosure (B) in a seperate account from the above also uses the term "at Seiad " when informing about the Grider's Ferry.

All the above evidence proves helpful when viewing the historic map of Seiad, Calif. dated 1913-1914 on file at the U.S.G.S. enclosure (C) This "at Seiad" refers to the original store located by Seiad Creek and the road which crosses it. (indicated below the "8" of the 1381' elevation.) The original store remains today and it is located 100ft from the old mouth of Seiad Creek where it fed the Klamath River. The Klamath River used to flow against the road now known as Highway 96. The Building to the lower left accross the road from the words "Seiad Valley" is the Ariel Lowden Ranch House still existing in Seiad. (A) A newer store was built 300 feet N.E. from the original Seiad store across Seiad Creek, and next to it was constructed Seiad School. All this points to the use of the words "at Seiad" as being in the location noted by the building symbols on the current U.S.G.S. map Seiad Valley quadrangle.

The acknowledgement that Grider Ranch, Creek and the southern portion of the proposed area is in Seiad Valley comes from the words of J.B. Grider, Volume 2 #10 1957 enclosure (D). Keep in mind that Grider Creek flows into the Klamath River, 1.75 miles West of Seiad, and given the few roads available in 1871, the proximity of Seiad Creek, the Klamath River and a store with post office within 100 feet of each other Grider reports "There are two large creeks in Seiad, Grider Creek and Seiad Creek." ENCLOSURE (E)

Further evidence includes Grider Creek and Ranch in the Seiad Valley area. Enclosure (F) is the patented mining claim document dated 1942, August 26, which states that the Grider Creek placer mining claim is "situate in the Seiad Mining District, Siskiyou County, Calif."

The Seiad Mining district is not limited to just the area of Seiad Creek, Grider Creek and the Klamath River. The Dept of Geological Survey refers to the Chromite Deposites in the Seiad Creek district, page D1 and introduces the reader to Seiad Valley Quadrangle. enclosure (G)

Finally, references on page D17 cite numerous studies referring to the "Seiad Valley Area" as the location of the Chromite Deposites. The map of these locations on page D4 places them outside the boundary of the proposed Vitaculture Area. Further evidence that Seiad Valley referrs to much more area than the single store and post office marked on the U. S. Geological Survey Map.

Growing conditions that contrast the proposed Seiad Valley area from the imediate surrounding area include the following:

Within the boundary Seiad Valley is considered an interior valley, a Mesic Climate regeme by the Dept. of Agriculture. The valley floor up to the 1600 foot contour line at the southern most portion and up to the 1800 foot contour line at the northern portion is composed of deep fertile soil mixtures of loam, sand, clay and rocks eroded from the surrounding mountain slopes. Cottonwood, Digger Pine and oak trees find fertility in the soils and much available moisture thru out the hot summers. Sunset New Western Garden Book 1979 considers the valleys East boundary on the edge of Zone 7. Enclosure (H)

The transitional zone of vegitation above the proposed boundary is very narrow and provides for a dramatic change of view that emphasizes the contour lines chosen. The abundant predominance of conifers; Cedar, Douglas Fir and Ponderossa Pine define the elevation above the boundary as the Xeric Climate Regeme by the Dept. of Agriculture. This regeme demands vegitation that must be more drougth tolarant to survive on thin, eroded, steep mountain soils with minimum summer moisture. A further contrast exists that defines the boundary and growing conditions and seperates the immediate areas. All of the land above the defined contour lines is managed for timber production, wildlife habitat and recreation. Cultivation of this land for grape vines or any other

alternate crop would severly affect established management practices. Habitat destruction, diversity of vegitation as well as major soil erosion would occur and therefor would not be environmentally sound.

The hydrology of the Seiad Valley area further contrasts it from the rest of the state and country. Rain and snowmelt pass thru and mix with the Chromite deposites located in the N.W. quarter of Seiad Valley Quadrangle. The Klamath River also contributes Chromite filtered water from Ladd Mine and Scott Bar, both immediatly up river from Seiad Valley. The immediate proximity to the source of Chromite as documented by the enclosure (G) "Chromite Deposites in the Seiad Valley and Scott Bar quadrangles, Siskiyou Co. California" 1981, along with other mineral concentrations present in the soils as documented on the enclosure (I) "Certificate of Analysis" Reed Engineering , distinguishes the Seiad Valley area.

The only area possible for the vine to yield the unique characteristics of the combination of soils and climate is within the proposed Seiad Valley Vitacultural boundary.

1951 VOL A #10

(A

SCIAD . . .

By BETTY LIVINGSTON & HAZEL DAVIS

The name, Seiad, was originally spelled "Sciad". It was an Indian name, meaning "hole in the ground" or "Peaceful Valley". The creek that runs through Sciad Valley has the same name and was known to the trappers before the prospectors came in 1850.

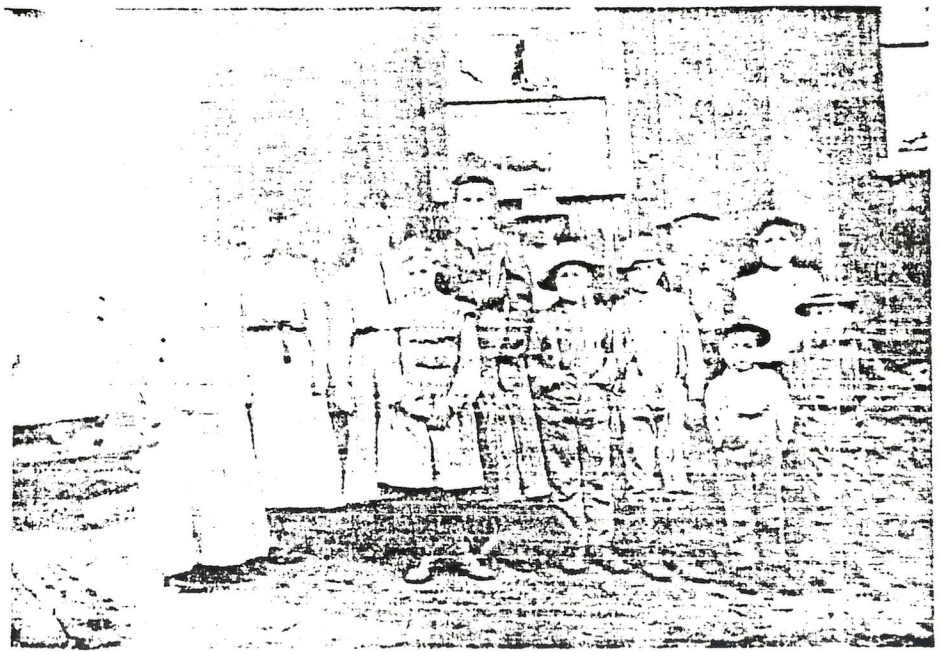
Bill Wood and Charles Bailey did hydraulic mining at the mouth of Sciad Creek. Mr. Bailey also served as postmaster during this time and when he received a new cancellation stamp for the post office, the "C" was changed to an "E", and so explains the change of the original spelling.

In 1851 the Lowden Ranch was cleared for raising apple trees and in 1865, Mrs. Henretta (Jensen) Leduc who was seven years old at the time, and the grandmother of Mrs. Martin, lived on the Lowden Ranch a short time, could clearly remember her father selling apples to the miners for

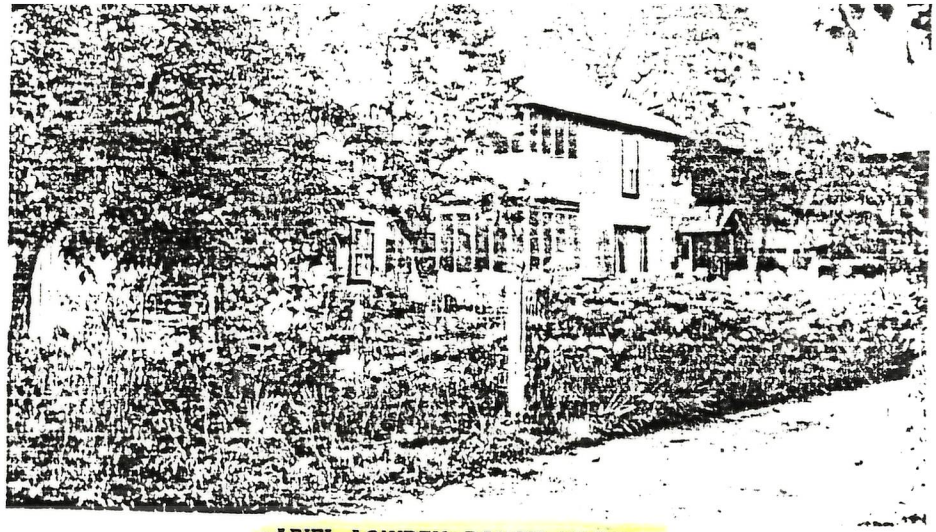
GRANT LOWDEN RANCH HOUSE
—Courtesy of Hazel Davis

50 cents each. This ranch was later taken over by John Scott Lowden and Sarah Lowden. They kept teamsters on their

(Continued on page 56)



HAMBURG SCHOOL ABOUT 1906
—Courtesy of Albert Kingsbury



ARIEL LOWDEN RANCH HOUSE
—Courtesy of Hazel Davis

SCIAD

(Cont'd. from page 41)

way down the river and in their lifetime had 13 children. The ranch was divided and two of their sons, Grant and Ariel, ranched for many years later until a dredging company bought parts of this ranch, turning it into rockpiles as the gold was taken from the once rich agricultural land.

The original house belonging to Grant Lowden still sits on the bench overlooking the valley, now owned and occupied by Mr. and Mrs. John Mulloy. The Ariel Lowden home which has changed hands twice in recent years, still sits at the other end of the valley. The old two-story house served as a hotel for many years, the Lowden family taking in travelers and boarders while taking care of their ranch which was situated on very productive agricultural land.

In the 1940s a dredging company made a deal with both Lowden brothers and most of the rich agricultural land was turned into rockpiles, the ground also being very rich in gold on both sides of Seiad Creek.

Volume 3 #9 1966

John Wood Family . . . ENCLOSURE (B)

By ALVENE BRIGGS

JOHN CHRISTOPHER WOOD
—Courtesy of the Wood Family

The Wood family was a part of the early settlement of the Thompson Creek and Fort Goff area taking part in mining operations as well as taking up land for homes to rear their families, their offspring still a part of these river communities.

The original Wood family had its beginning in Pettigoe, Fermanagh County, Northern Ireland, where their father, Jared Wood, had a flour mill. There were eight children born to him and his wife and this made ten mouths to feed when the famine came to Ireland, and it was more than Jared could take care of. The decision was made that four of the children should leave Ireland for America. Leaving for America were William, 26 years old; Ann, 23 years old; James, age unknown; and John, 12 years old.

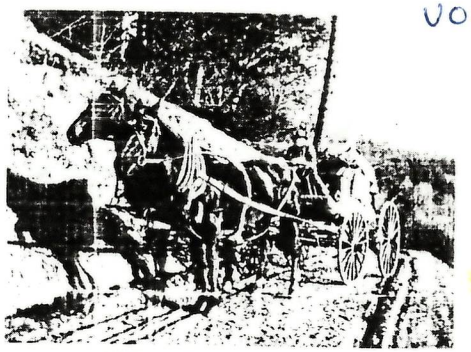
In 1851, the four young Wood children took a ship for New York, landing in Brooklyn. They stayed in the east for three years, part of the time in Connecticut, where young John learned the trade of pattern making. By 1854, they had heard of the gold discovery and they started for the gold fields together.

They traveled around the Horn on the steamer *George Law* to Aspinwall and then transferred to another steamer, *John L. Stevens* for the trip up the coast to San Francisco. They headed north, spending six months in Tuolumne County and by 1855 they were in Yreka where they remained only a short time before they traveled down the Klamath River where three of them were to spend the remainder of their lives.

William Wood was a miner, and spent most of his time on the Klamath at Fort Goff. He became engaged to Mary Thorpe, took up a homestead and was building a house, when his bride-to-be got married to another man! William never ventured near the sea of matrimony again. He spent some time working with his brothers, James and John and his brother-in-law, Charles Bailey, in the rich diggings near the mouth of Seiad Creek. In 1911, he passed on and was buried in the Fort Goff cemetery.

Ann Wood married Charles Bailey, soon after they arrived in California. For a time they had a small store at Seiad and in August of 1871 he was appointed postmaster and held this position until it was taken over by William T. Grider in September, 1885. Charles also did mining, and as mentioned earlier, worked the rich diggings at the mouth of Seiad Creek. In his later years he took his family to Hamburg, where they made their home. Ann passed on in 1894 and is buried in the Bailey family plot at Hamburg cemetery with her husband and four children.

James spent a few years in the mines,



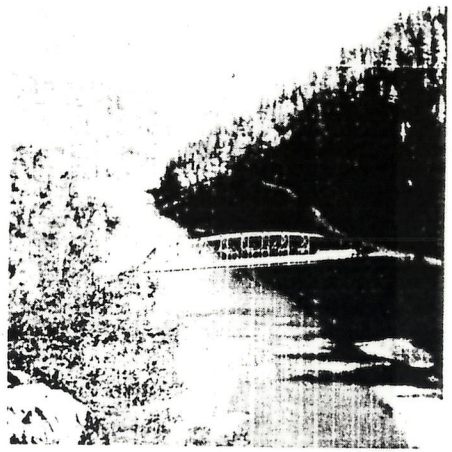
THE STAGE TO YREKA
Jack Titus, grandson of John Titus, is the driver.
—Courtesy of Aurelia Fowler

in his books, *Lore and Legends of the Klamath River Indians* and *Before the White Man Came*. He tells of many Indian ceremonies, such as Pick-ya-wish, and their meanings. These ceremonies are no longer held, and with their going, the Klamath River communities have lost something which was distinctively their own. However, the races have learned to live together well, attending the same schools and churches, and enjoying the same activities.

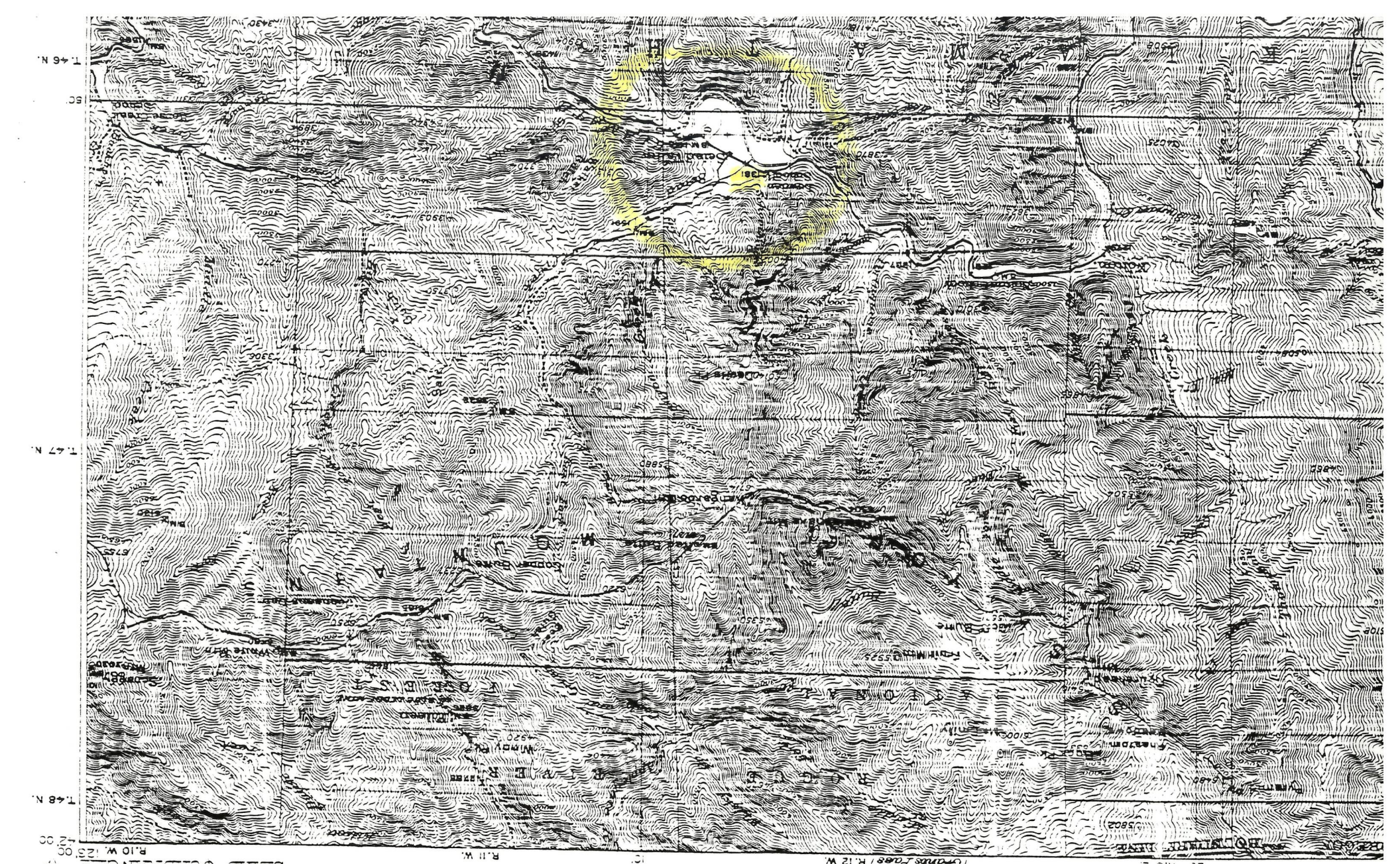
The first school was established in 1878. This district has continued until the present time although it has become larger as other nearby school districts have lapsed. The school had been moved several times before it was built on its present site in 1941. It has had several additions to accommodate the increased enrollment which is now nearly four hundred. These buildings were severely damaged in the 1964 flood and many are thinking of a change of site to one above the threat of flood damage.

Another problem for the early settlers was transportation. This is a region of narrow valleys, steep forested mountains and rocky cliffs. The pack trails sufficed for quite some time but as the population increased other ways were needed. As early as 1870, the Siskiyou County Board of Supervisors appointed viewers for a road to the Del Norte County line. Evidently, no further action was taken then as the trails were still the means of travel in 1876 as Charles Graves says in his book: "I arrived there tired and footsore, hungry and thirsty after a long walk over a steep pack trail (from Yreka). There were no roads to Happy Camp at that time." Late in 1887 a road between Thompson Creek and Happy Camp was accepted as a public road. While early in 1891 there was a road finished over Evans Mountain from Grider's Ferry at Seiad to the Evans Ranch on China Creek. It was the road on the Thompson Creek side of the river that was accepted as a county road as the grade was easier. These were just wagon roads not more than wide trails but the freight wagons were able to use them and the pack trains were no longer needed. This road was improved somewhat over the years but in 1918 it still ended at Happy Camp. There was only a trail over the mountains to Orleans.

Now work started on a road down river to be built by the Bureau of Public Roads. In a news item, it stated that W. A. Bechtel had offices in Happy Camp and had started construction work on the Klamath River road during the summer of 1919. By September of the following year, according to another news item, work had progressed as far as Crawford Creek about fifteen miles below Happy Camp. Crews were working up the river, too, and in the late summer of 1922, when the Blue Nose



BLUE NOSE BRIDGE
Built in 1922
—Courtesy of Hazel Davis



CALIFORNIA
SISKIYOU COUNTY
SILAS QUADRANGLE

R. B. Marshall, Chief Geographer.
Geo. R. Davis, Geographer in charge.
Topography by J. W. Muller.
Control by C. F. Urquhart, A. I. Oliver, and L. F. Biggs.
Surveyed in 1913-1914.

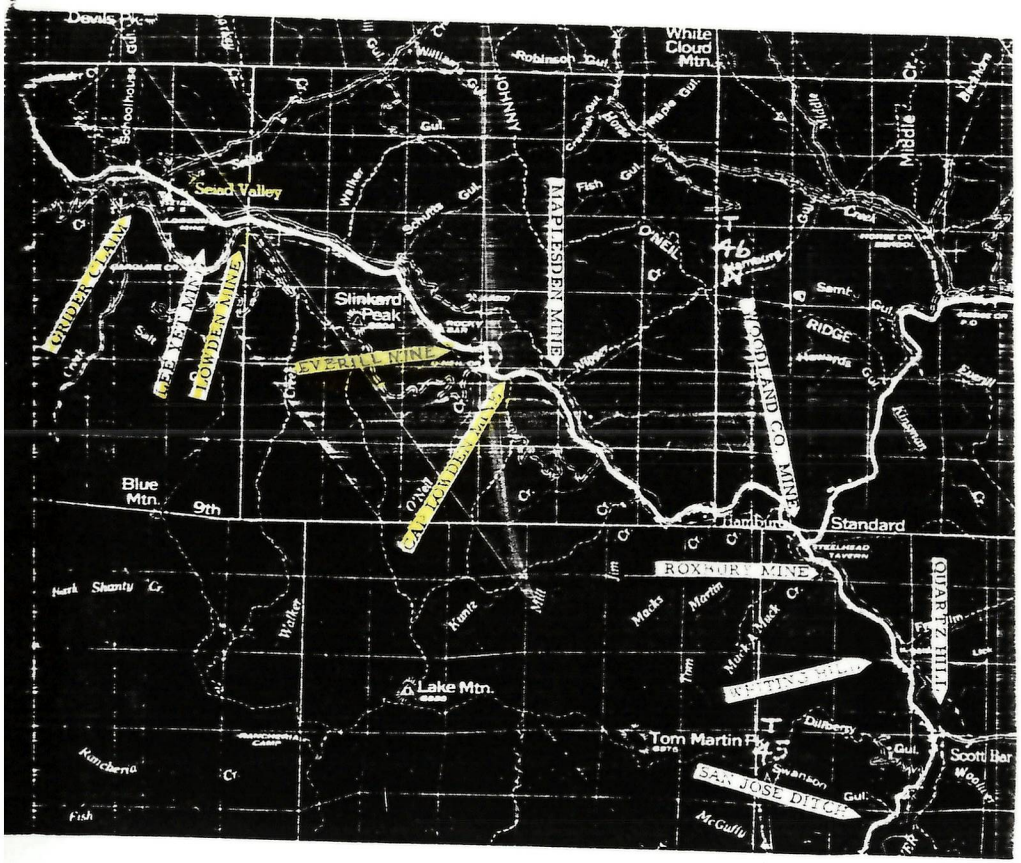
SCALE 1:125000

1 0 1 2 3 4

5000 0 5000 10000 15000

1 0 1 2 3 4 5

Volume 2 #10 1957



THE MIDDLE KLAMATH

Scott River to Happy Camp

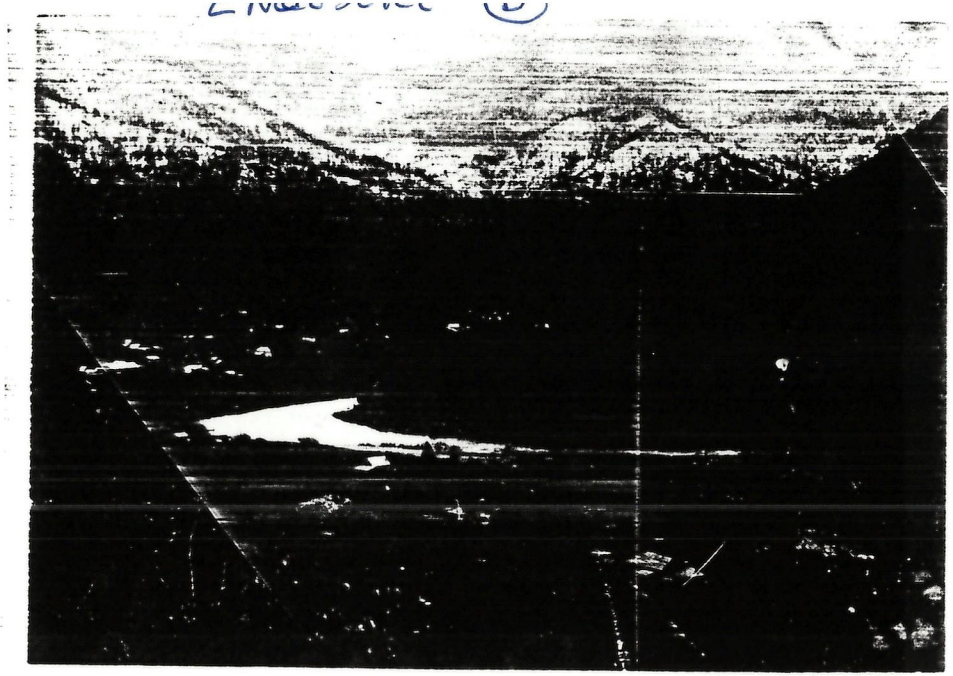
Starting at the fabulous Quartz Hill the placer ground of the Scott River produced the largest and most unusual nuggets in the county. For years miners threw out the pesky black sand which hindered recovery of the yellow flakes. Little did they know that the black sand was actually a high grade telluride—gold mineral. On the Klamath River below the confluence of the Scott River the placer deposits were noticably richer. Some were quite large and took several years to mine as did the Lee Yet Mine on the east side of Seiad Valley.

Gold Mining from Scott Bar to Happy Camp

By J. B. GRIDER, D. M. D. Emeritus

Quartz Hill at Scott Bar dates from about 1868 and has been in operation off and on since the above date. Quartz Hill, without question, was the mine that produced the gold for the Scott River and many mines down the Klamath.

The great ledge at Scott Bar was cross cut and decomposed by the elements and was washed down Scott River and into the Klamath where it was united, carried and washed downstream which supplied the gold for the mines down the Klamath River.



—courtesy Chester Barton

HAMBURG

Hamburg was the center of a rich mining district in the early days. Several mines can be seen in this photo taken in the 1890s.

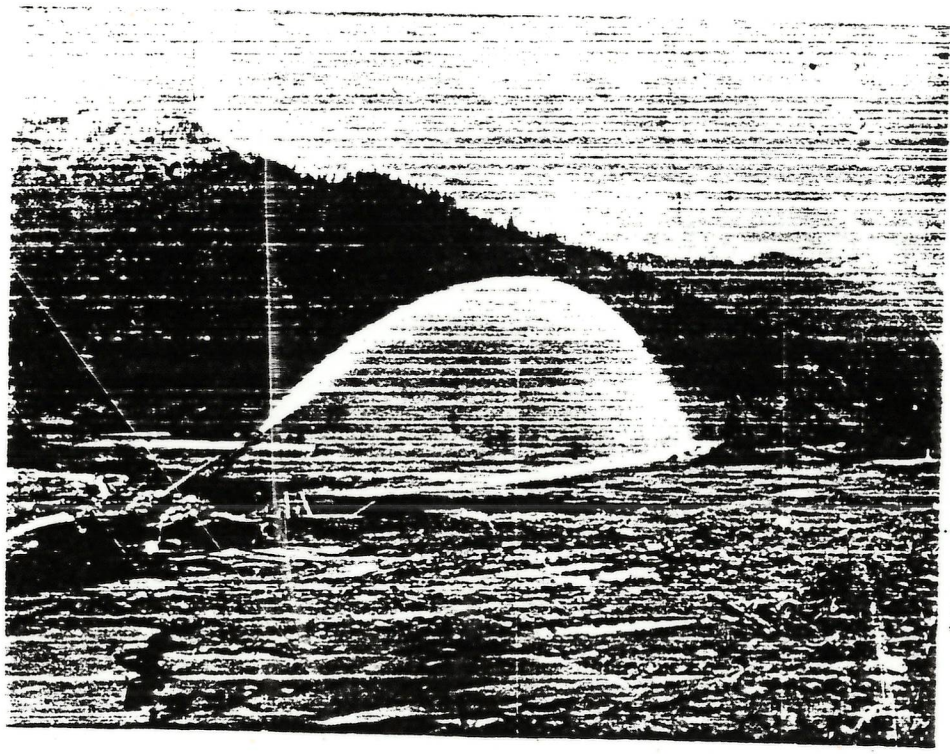
A large amount of mining on Scott River was confined to the present river channel as it appears today with an addition of drifting and hydraulic mining by George Nesbit, George Milne and Martin Andrews.

Leaving Scott Bar, I will begin at the mouth of Scott River to Hamburg Bar. This mining district will include Hamburg, where the wingdamming method was used, with dams built in the river like a coffer dam. These extended out into the river at about 75 feet at right angles with the river and turned downstream about 125-150 feet, then back to shore, thus forming a rectangular enclosure. After the enclosure was finished all water in the dam was pumped out and derricks installed to hoist out the gravel and boulders. The boulders were piled to one side by the derrick and the gravel was washed into the flume as it contained the gold. Some of the wing dam operators of Hamburg were: Bill Kettlewood, Tom Miner, Bill Offield. Ben Maplesden, Martin Andrews and Green Hicks. There was also some drifting and hydraulic mining at Hamburg by Maplesden and Sons.

The Cap Lowden hydraulic mine was about three miles down the Klamath from Hamburg. They derived their water from the Johnnie Oneil Creek. The Johnnie Oneil placer also derived its water from Johnnie Oneil Creek. Across the river opposite Oneil's was the Maplesden mine and it secured water for hydraulic mining from Nigger Creek, on the north bank of the river. The next mine was known as the Johnnie Everill hydraulic mine, located opposite the Ladd Chrome Mine across the Klamath.

After hearing about the mine in Seiad, I wondered where the mine was located. I found it about six miles up the river and it is not in Seiad Valley as our country papers stated. Seiad is located six miles on the Klamath below the Ladd Chrome Mine. Seiad is a small valley two miles

Vol 2 #10 1957 (E)



—courtesy J. B. Grider

GRIDER MINE

Looking across the Grider Mine near the mouth of Grider Creek. Seiad Valley is on the right.

long and one mile wide. I was born and raised in Seiad and am well acquainted with the country.

There are two large creeks in Seiad, Grider Creek and Seiad Creek. Grider Creek flows north into the Klamath from the Marble Mountain territory. Seiad Creek flows south into the Klamath from the Siskiyous and Red Mountain.

There were only four families living in Seiad when I was a boy, J. S. Lowden, W. T. Grider, Robert Rainey, and M. B. Phillips.

Walker Bar is on the east side of the Klamath from Seiad. Near the highway bridge two companies of Chinese mined with derricks in separate mines, Upper and Lower companies of about twelve men in each company.

J. S. Lowden's hydraulic mine was located on the south bank of the Klamath, deriving its water from Walker Creek.

Across the river opposite the J. S. Lowden mine was the largest, the Lee Yet hydraulic. About twenty-five Chinese operated two giants night and day, also Sunday, for years. It was a very extensive mine and worked out a large tract of land. They used water from Seiad Creek and had a wonderful water right which supplied the mine during some of the summer months.

Down the river about two miles on the south bank was the W. T. Grider and Sons placer mine near the banks of Grider Creek, from where it derived its water and flowed through our farm land. Two giants—hydraulics—were operated.

Two miles down the river from Seiad was the Masonic Bar Mine on the south side of the river. This mine was operated by Chinese with derricks using water from Grider Creek. About a mile farther down the river was the Portuguese hydraulic mine owned by James Camp and Charles Bailey.

ENCLOSURE (F)

COMPARED

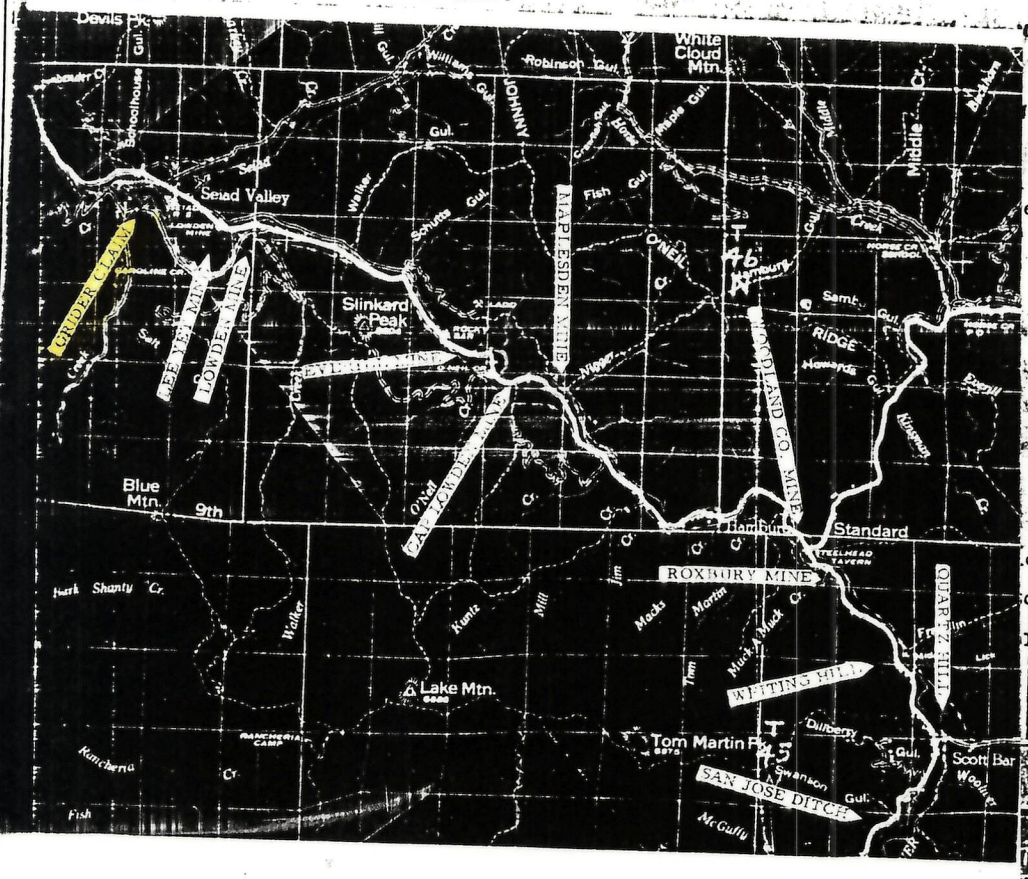
1519

Sacramento 033689 4--1083

THE UNITED STATES OF AMERICA,

To all to whom these presents shall come, Greeting:

WHEREAS, In pursuance of the provisions of the Revised Statutes of the United States, Chapter Six, Title Thirty-two, and legislation supplemental thereto, there has been deposited in the General Land Office of the United States the Certificate of the Register of the Land Office at Sacramento, California, accompanied by other evidence, whereby it appears that the Grider Creek Ranch, Inc., did, on August 26, 1942, duly enter and pay for that certain mining claim or premises, known as the Grider Creek placer mining claim, situate in the Seiad Mining District, Siskiyou County, California, described as the Lots sixteen and twenty-one of Section eleven in Township forty-six north of Range twelve west of the Mount Diablo Meridian, and containing twenty-seven acres and fifty-six hundredths of an acre.



THE MIDDLE KLAMATH

Scott River to Happy Camp

Starting at the fabulous Quartz Hill the placer ground of the Scott River produced the largest and most unusual nuggets in the county. For years miners threw out the pesky black sand which hindered recovery of the yellow flakes. Little did they know that the black sand was actually a high grade teliuride—gold mineral. On the Klamath River below the confluence of the Scott River the placer deposits were noticably richer. Some were quite large and took several years to mine as did the Lee Yet Mine on the east side of Seiad Valley.

Gold Mining from Scott Bar to Happy Camp

By J. B. GRIDER, D. M. D. Emeritus

Quartz Hill at Scott Bar dates from

The great ledge at Scott Bar was cross

CONTRIBUTIONS TO ECONOMIC GEOLOGY

Chromite deposits in the Seiad Valley and Scott Bar quadrangles, Siskiyou County, California

By HENRY R. CORNWALL

ABSTRACT

Chromite deposits in the Seiad Creek and McGuffy Creek districts and the Ladd mine, Siskiyou County, Calif., occur in dunite-peridotite bodies that are part of an ophiolitic sequence, the western Paleozoic and Triassic belt of the Klamath Mountains. The deposits are estimated to contain nearly 300,000 metric tons of rock containing an average of about 8 percent Cr_2O_3. Individual deposits range in size from 200 to 135,000 metric tons of rock and consist of thin parallel layers and linear lenses of chromite in dunite. The rocks are foliated and in part tightly folded, with gently plunging lineations indicated by fold axes, parallel pencil-shaped seams of chromite, and rods of dunite.

Representative chromite analyses of the deposits indicate a range of Cr_2O_3 content from 54 to 59 percent and in Cr/Fe ratio from 2.2 to 2.8. Al_2O_3 ranges from 5 to 9 weight percent, MgO 11 to 16 weight percent, total Fe as Fe_2O_3 17 to 25 weight percent, and NiO 0.06 to 0.15 weight percent. Contents of platinum-group metals in the chromite samples are low except for one sample that contains 0.13 ppm platinum and 0.069 ppm rhodium.

The outlook for economic exploitations of these deposits is not good. They are too small and low grade to meet U.S. chromite requirements for more than a very short period.

INTRODUCTION

The chromite deposits in the Seiad Valley and Scott Bar quadrangles, Siskiyou County, Calif., constitute the largest reserve of chromite in northern California. They have been described by Diller (1921), Rynearson and Smith (1940), and Wells and others (1949). I studied these deposits during the period 1977–79 in order to reappraise their size, nature, and geologic setting in the framework of current geologic concepts of the area.

GEOLOGIC SETTING

The deposits occur in the so-called western Paleozoic and Triassic belt of the Klamath Mountains (Irwin, 1964). The rocks are part of an ophiolitic terrane described by W. P. Irwin (written commun., 1978) as follows:

"The belt is 300 kilometers long from south to north and is generally between 40 and 80 kilometers wide. On the east the rocks of the belt are thrust beneath Devonian metamorphic rocks of the central Klamath Mountains, and on the west are

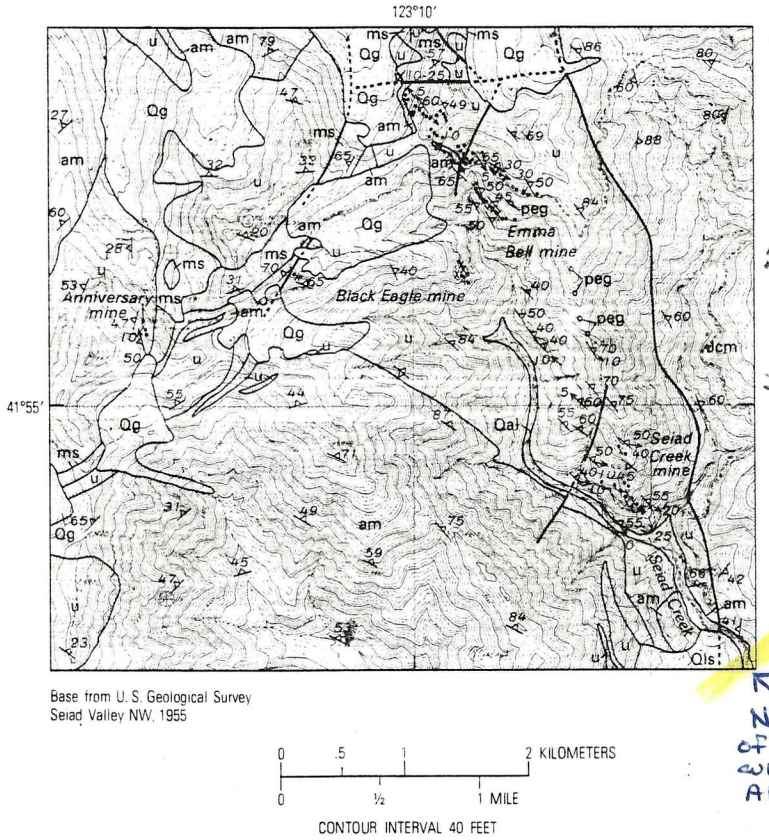


FIGURE 2.—Geology and chromite deposits of the Seiad Creek area (modified from Medaris, 1966).

Kangaroo peridotite of Medaris (1966, p. 106), extends southwest from near the middle of the dunite for 4.8 km with a width of 0.8–1.2 km. It is separated from the dunite by a thin screen of metasedimentary rocks. The small Anniversary chromite deposit occurs in this harzburgite body just west of the metasedimentary screen. The dunite and harzburgite locally contain scattered lenses and irregular dikes of lherzolite, pyroxenite, and amphibolite (pargasite), most 1–40 cm thick but a few as thick as 25 m. The pyroxenite consists of enstatite, augite, or both. These rocks are fresh except locally near the margins of the body where serpentinization may be pronounced.

The olivine of the dunite and harzburgite is xenoblastic, the individual grains ranging from 0.15 to 1.4 mm in diameter and averaging about 0.4 mm. The subhedral chromite grains range

nderthrust by Upper Jurassic flysch and volcanic rocks (Galice Formation). The elt consists of both melange and coherent slabs of ophiolite and associated oceanic ocks as well as andesitic volcanic rocks.

In the Seiad Valley-Scott Bar area, the ophiolitic rocks of the vestern Paleozoic and Triassic belt consist of slablike bodies of unite and peridotite containing the chromite deposits described ere enclosed in amphibolite and metasedimentary rocks. The mphibolite was probably derived from basaltic and andesitic lows, tuffs, and tuffaceous sediments and possibly also gabbros. ntrusive diorite, quartz diorite, and granodiorite of presumable urassic age also occur in the area.

The rocks of the western Paleozoic and Triassic belt are bounded n the east by a high-angle fault separating them from a large vindow of the Upper Jurassic Condrey Mountain Schist composed f quartz-muscovite schist, commonly graphitic, and actinolite-hlorite schist. Hotz states (1971, p. 13) that: "their lithology uggests that they were derived from a sequence of pelitic sedi-ientary rocks with some interbedded mafic volcanic rocks." These chists are surrounded and overlain structurally along a thrust ault by rocks of the western Paleozoic and Triassic belt, including ne ultramafic rocks of the Seiad Valley-Scott Bar area. Klein 1977) reports that at Happy Camp, 20 km west of the Condrey fountain area, the Upper Jurassic Galice Formation with litholgy similar to the Condrey Mountain Schist is structurally overlain long a thrust fault by amphibolite and other rocks of the western aleozoic and Triassic belt. He suggests that the Condrey Mountain Schist is correlative with the Galice Formation with a slightly igher metamorphic grade.

SEIAD CREEK CHROMITE DEPOSITS

LOCAL GEOLOGY

The Seiad Creek chromite deposits in the northwest quarter of ne Seiad Valley quadrangle occur in two tabular ultramafic odies, one a dunite, the other an harzburgite. The two bodies are eparated by a thin screen of metasedimentary rocks, marble, uartzite, and quartz-mica schist and are surrounded by a large rea of amphibolite (figs. 1 and 2).

The dunite body, called the West Fork dunite by Medaris (1966, p. 06), extends north-northwest for 6.4 km; it has a maximum ickness of 3.2 km and tapers at both ends. The greatest concenations of chromite in the district occur in this body, one near its uth end at the Seiad Creek mine and the other near the middle at e Emma Bell mine (fig. 2). An ultramafic body of harzburgite, the

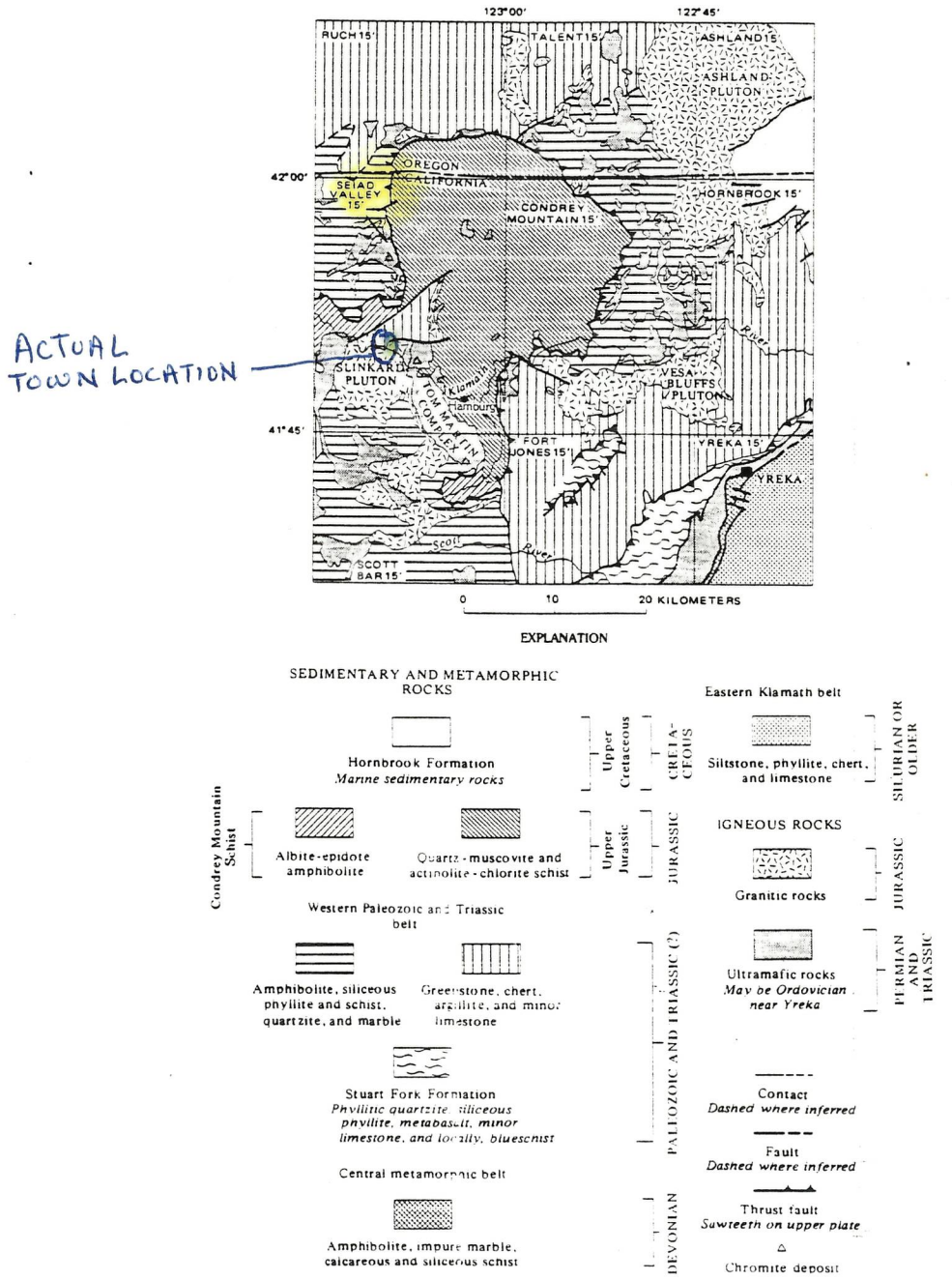


FIGURE 1.—Generalized geology of the Seiad Valley and adjacent quadrangles showing locations of chromite deposits described here (from Hotz, 1979).

ranges from 54.4 to 58.9 weight percent except for one McGuffy Creek sample (M2) that contains only 49.7 weight percent. This sample contains about twice as much Al_2O_3 (16.3 weight percent) as the other samples; the Al_2O_3 must be in the chromite rather than from included silicates, because the SiO_2 content is only 1.5 weight percent. NiO ranges from 0.06 to 0.15 weight percent; MgO ranges from 11.1 to 15.5 weight percent. Total iron calculated as Fe_2O_3 ranges 17.4 to 24.6 percent. The Cr/Fe ratio ranges from 2.16 to 2.79 and is mostly greater than 2.4.

The assays for platinum-group metals are all low and not noteworthy except for sample S46-1 from the Anniversary deposit, Seiad Creek area. This sample contains 0.13 ppm platinum and 0.069 ppm rhodium; these high contents suggest that other chromite deposits in the Seiad district may have anomalous amounts of platinum-group metals.

ECONOMIC SIGNIFICANCE

The outlook for economically feasible exploitation of the chromite deposits discussed here in the Seiad Valley and Scott Bar quadrangles is not good for the foreseeable future. The deposits are too small and low grade to meet the U.S. chromite requirements for more than a very short period (Thayer, 1973). The largest single deposit, located at Seiad Creek, is 135,000 metric tons containing about 6 percent Cr_2O_3. The McGuffy Creek and the Ladd deposits range from 200 to 12,000 metric tons each; the grade is higher than at Seiad Creek, probably 15-20 percent Cr_2O_3. The Cr/Fe ratio for all of the deposits would probably average close to 2.5.

The deposits described here are disseminated; the chromite would have to be concentrated to be economically recovered. A deposit consists of a number of layers and schlieren 1-5 cm thick, of massive or abundant chromite separated by similar or greater thicknesses of dunite, which is barren or contains scattered chromite grains. Although the largest disseminated deposit found thus far by exploration contains about 135,000 metric tons of mineralized rock, most are less than 15,000 metric tons. The total tonnage is probably close to 300,000 metric tons averaging about 8 percent Cr_2O_3.

The economically minable chromite deposits found elsewhere contain pods and layers of massive chromite thick enough so that nearly pure chromite can be mined from them. Most of the high-grade, high Cr/Fe chromite reserves are in Rhodesia and South Africa. An average deposit there contains at least 1,000,000 metric tons (Cotterill, 1969, p. 174) of ore with Cr/Fe of 3.0 or more

(Cotterill, 1969, p. 171-172; Anhaeusser, 1974, p. 18). Substantial reserves, 1-5 million metric tons of high-grade ore, also occur in Turkey, the Phillippines, Malagasy, India, Iran, and Brazil (Thayer, 1973, p. 117-118).

REFERENCES CITED

Allen, J. E., 1941, Geological investigation of the chromite deposits of California: California Journal of Mines and Geology, v. 37, no. 1, p. 101-167.

Anhaeusser, C. R., 1974, Archean metallogeny in southern Africa: Economic Geology Research Unit, University of Witwatersrand, Johannesburg, Information Circular 91, 38 p.

Barrows, A. G., Jr., 1969, Geology of the Hamburg-McGuffy Creek area, Siskiyou County, California, and petrology of the Tom Martin ultramafic complex: Los Angeles, University of California, Ph. D. thesis, 301 p.

Cotterill, P., 1969, The chromite deposits of Selukiwe, Rhodesia, *in* Wilson, H. D. B., ed., Magmatic ore deposits: Economic Geology, Monograph 4, p. 154-186.

Diller, J. S., 1921, Chromite in the Klamath Mountains, California and Oregon: U.S. Geological Survey Bulletin 725, p. 1-84.

Haffty, Joseph, and Riley, L. B., 1968, Determination of palladium, platinum, and rhodium in geologic materials by fire assay and emission spectrography: Talanta, v. 15, p. 111-117.

Hotz, P. E., 1971, Geology of lode gold districts in the Klamath Mountains, California and Oregon: U.S. Geological Survey Bulletin 1290, 91 p.

———1979, Regional metamorphism in the Condrey Mountain quadrangle, north-central Klamath Mountains, California: U.S. Geological Survey Professional Paper 1086, 25 p.

Hotz, P. E., and Jackson, E. D., 1963, X-ray determinative curve for olivines of composition Fo_{80-95} from stratiform and alpine-type peridotites, *in* Geological Survey research 1962: U.S. Geological Survey Professional Paper 450-E, p. E101-102.

Irwin, W. P., 1964, Late Mesozoic orogenies in the ultramafic belts of northwestern California and southwestern Oregon: U.S. Geological Survey Professional Paper 501-C, p. C1-C9.

Klein, C. W., 1977, Thrust plates of the north-central Klamath Mountains near Happy Camp, California: Short contributions to California Geology, California Division of Mines and Geology Special Report 129, p. 23-26.

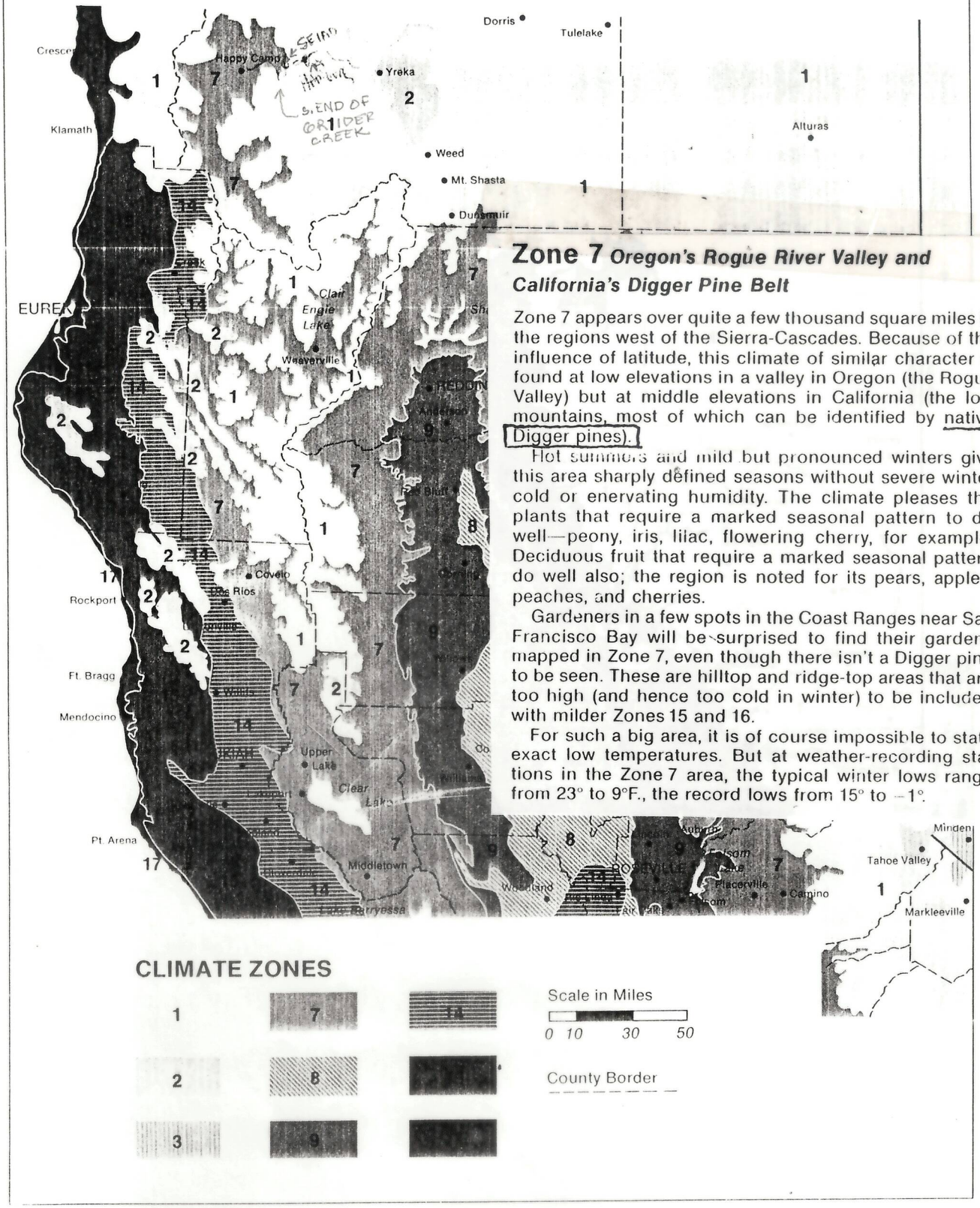
Medaris, L. G., Jr., 1966, Geology of the Seiad Valley area, Siskiyou County, California, and petrology of the Seiad ultramafic complex: Los Angeles, University of California, Ph. D. thesis, 333 p.

Rynearson, G. A., and Smith, C. T., 1940, Chromite deposits in the Seiad quadrangle, Siskiyou County, California: U.S. Geological Survey Bulletin 922-J, p. J281-J306.

Thayer, T. P., 1973, Chromium, *in* Brobst, D. A., and Pratt, W. P., eds., United States mineral resources: U.S. Geological Survey Professional Paper 820, p. 111-121.

Wells, F. G., Smith, C. T., Rynearson, G. H., and Livermore, J. S., 1949, Chromite deposits near Seiad and McGuffy Creeks, Siskiyou County, California: U.S. Geological Survey Bulletin 948-B, p. B19-B62.

ENCLOSURE (6)



Zone 7 *Oregon's Rogue River Valley and California's Digger Pine Belt*

Zone 7 appears over quite a few thousand square miles in the regions west of the Sierra-Cascades. Because of the influence of latitude, this climate of similar character is found at low elevations in a valley in Oregon (the Rogue Valley) but at middle elevations in California (the low mountains, most of which can be identified by native Digger pines).

Hot summers and mild but pronounced winters give this area sharply defined seasons without severe winter cold or enervating humidity. The climate pleases the plants that require a marked seasonal pattern to do well—peony, iris, lilac, flowering cherry, for example. Deciduous fruit that require a marked seasonal pattern do well also; the region is noted for its pears, apples, peaches, and cherries.

Gardeners in a few spots in the Coast Ranges near San Francisco Bay will be surprised to find their gardens mapped in Zone 7, even though there isn't a Digger pine to be seen. These are hilltop and ridge-top areas that are too high (and hence too cold in winter) to be included with milder Zones 15 and 16.

For such a big area, it is of course impossible to state exact low temperatures. But at weather-recording stations in the Zone 7 area, the typical winter lows range from 23° to 9°F., the record lows from 15° to −1°.

1/10 ENCLOSURE I

REED ENGINEERING
ASSAYERS & REFINERS
2166 College Avenue
Costa Mesa, CA 92627
714/646-3782

CERTIFICATE OF ANALYSIS

SEMI-QUANTITATIVE SPECTROGRAPHIC

Brian Helsaple
P.O. Box 521
Seiad Valley, CA 96086

Date: 10/21/86

Sample: Mineral

	(c) units	Pct.	Lb/Ton	3Q
Aluminum	660	4.1%	82	3.5
Antimony*				
Barium	850	.002%	.04	4.5
Beryllium				
Bismuth				
Cadmium				
Calcium	810	6.3%	126	
Cesium				chromite ~10%
Chromium	1600	1.8%	36	5.85 to 4.6
Cobalt				
Columbium				
Copper				
Fluorine				
Gallium				
Gold*		.02 oz/TON		19
Hafnium				
Indium				
Iridium				
Iron	1535	8.6%	172	5.18
Lead				
Lithium				
Magnesium	650	1.4%	28	3.0 → 2
Manganese	1260	.4%	8	3.2
Mercury				
Molybdenum		.002%	.04	
Nickel				
Paladium				
Platinum*				
Potassium	620	.2%	4	
Rhenium				
Rhodium				
Rubidium				
Ruthenium				
Scandium				
Silver*		.37 oz/TON		
Sodium	970	5.8%	116	
Strontium				
Tantalum				
Tellurium				
Thallium				

	Pct.	Lb/Ton
Thorium		
Tin		
Titanium	.03%	.6
Tungsten		
Uranium(e)		
Vanadium		
Zinc		
Zirconium		
RARE EARTH ELEMENTS		
Cerium		
Dysprosium		
Erbium		
Europium		
Gadolinium		
Holmium		
Lanthanum		
Neodymium		
Lutecium		
Praseodymium		
Samarium		
Terbium		
Thulium		
Ytterbium		
Yttrium		

Silica, Gases, Water, Nondetectables, Remaining Contents, Percent: 71.3
tr=trace; r=radioactive; *=separate test advisable; c=possible commercial grade. All values are approximate, not exact, excludes losses & costs. (e)=U308 equivalent. x=further tests of sample or area suggested.

Microfilm: [redacted]

Other data:

Assayer: P. Reed

Sections 3.201 (b)(1)

Mining controlled by State County board of Supervisors - County code is not applicable for Forest Purposes / on site construction - restoration LAND!

WHITE RIESLING ON THE ROCKS

By Emilie A. Frank

We need more enterprising young men like Brian Helsaple of Seiad Valley. He turned 20 acres of dredger tailings into a fruitful vineyard, and those rocks were even instrumental in the successful growth of White Riesling vines. Impossible, you say? Listen, you're going to love this true story.

"In 1941," says Brian, "Seiad Valley in Siskiyou County existed as farming land with the Klamath River along its south side and Seiad Creek winding through its middle—it was surrounded by forest of pine, fir and cedar, and the soil of the valley floor provided rich nutrients for potato crops, corn, wheat fields, apple and pear orchards, to name a few. What is hard to believe is that this land was raped for its gold, then left in its upturned condition. Some say hydraulic mining and the dredge that dug 10 to 20 feet of soil to reach the ancient river bed uncovered only 20% of the gold, along with other precious metals. Piles of rounded rocks called 'tailings' leave a trail where the dredger worked. The dredge destroyed over one-fifth of the valley floor—eventually bull pine, cottonwood, willow trees and blackberry vines grew from the deep pits. A few weeds found particles of soil to sprout in but the fertility of a rock pile is scant."

The dredge was moved out of Seiad Valley after it had done its work and some of the properties in that area of tailings were divided into saleable parcels, part dirt and part rock. Brian Helsaple and his brother bought a 40-acre parcel that included 20 acres of undisturbed ground, along with four houses and 20 acres of rock tailings. The houses they rented to Forest Service workers and loggers. The ground could be put into crops, but they took a long look at the 20 acres of rock and wondered. What could be done with 20 solid acres of rock?

While Brian cleared out the prolific blackberries, which were about to take over the good 20 acres, and built a house in 1982, he discovered an abundance of wild grapevines growing along the river. And then he had a brainstorm...

"It was a great year for wild grapes," he said. "Spring began early and fall temperatures were warm enough to provide a sugar content of 18 degrees Brix. Wine growers prefer 20 degrees for adequate fermentation. I had made blackberry wine so it was natural to try wild grapes. In searching for the correct steps to follow to make grape wine I found a German wine book that showed White Riesling vines growing on the mountain slopes overlooking the Mosel River. The mountain is shale, which is a rock, so I thought why not plant grapes on the rocks here? After an estimate of the yearly high and low temperatures for the growing season here, the valley seemed to be a 'region I' with 1400-degree days. And after taking daily high and low readings for the past three years, it has varied from 1840 to 2680-degree days—which make the valley a 'region II', almost."

His first step was to try a test plot to see how the individual varieties would grow. Pinot Noir, Chardonnay, Gewurztraminer and White Riesling were chosen and cuttings were acquired from Oregon vineyards. (California sells certified cuttings grafted onto Phylloxera-resistant rootstocks, but since this is a Phylloxera free area, it was decided to use non-grafted cuttings.) So he bought 400 in February, 1983, for 15¢ each and placed them in a sand and sawdust mixture. They began to callous. On May 10th the cuttings showed bud growth and were placed in a nursery, covered with plastic to provide shade, and they took off. Watered at 10-day intervals, some of the arms reached four-foot lenghts, even after being pruned in mid-summer.

Fall came and the leaves turned rusty brown. "The vision of this occurring in a real vineyard in front of my house was overwhelming," said Brian, "but would the grapes grow on the rocks?"

With the first rain he soaked the rocks to keep the dust down and work commenced in pushing the piles into the holes to make the rocks level. He went over the rock terrain, back and forth, with an old 1937 D7 cable dozer—it took 62 hours to complete four acres and more time was spent repairing the old dozer but he was determined to plant the White Riesling on the rocks. The Pinot Noir, Gewurztraminer and Chardonnay would be planted on a south-facing sloping hillside in the dirt, which was soil rich from years of decomposed willow leaves. He dug 300 holes with a clam post-hole digger then transplanted them, after the roots were cut back to within four inches of the cutting, placing them in a five-gallon water and B-1 mixture.

You'd almost have to see this to believe it—a vineyard thriving on acres of dredger tailings. And this photo is over a year old. The vineyard of White Riesling grapes is lush this year over there in Seiad Valley.

Now to plant the White Riesling in the rocks. "The rocks proved to be a challenge," Brian explained. "Holes were dug with a bent three-fingered fork on hands and knees as close to the knot in the planting string as permitted. Large rocks were encountered quite often but evidence of dirt-sand mixture, from the eroding rocks, was plentiful. It rained while digging and the work became easier as the rocks didn't fall back into the holes so easily. Digging was also done with a hoe until a large rock was encountered. The holes were 14 inches deep and the vines transplanted as before, but with the addition of three shovels of a peat mixture which provided the roots a new start. Rocks were pulled around the stem with two buds exposed, leaving no appearance of soil."

It was done. The vineyard was planted and all he could do was wait. Spring of 1984 arrived, grape buds appeared—and so did a late spring frost. The three varieties planted in the soil were crippled, but not the White Riesling.

Why? Why didn't the frost nip the White Riesling?

"I assumed that the rocks gave off just enough heat to protect the little buds so close to the ground," said Brian. "The healthiest bud was allowed to reach for the sky, all others were constantly removed as well as the clusters of grapes that formed. The vines planted in the soil, however, had to start all over again with their secondary bud and thus were two weeks behind the White Riesling."

Posts were then cut from cedar trees on the property and were put by the White Riesling first—again holes had to be dug with the three-fingered fork, and by June 3rd the Riesling vines were 30 inches long and tied twice to their posts. Since it seemed hotter on the rocks (and there might be less water storage) he watered them with a rai bird for 12 hours every 10 days. The vines on the so were watered only three times the whole season. The showed slow growth by their close bud spacing, but a fe did manage to reach three-foot heights. On the other hanc the White Riesling topped five feet and were then cut bac to form heads at 40 inches. By the time fall rolled arounc Brian discovered that one vine had formed a four-foot arn internode spacing was an average of four inches and trunk were nice and thick.

During the long, cold winter the vineyard slept. By Apr 8th the buds began to swell and after a week of growt each trunk had 16 to 20 clusters of grapes forming. Bria removed everything on the trunks except for the top tw or three growing arms, which would form next year' crop.

Then in May the temperature dropped dramatically t 24 degrees for four nights. Again, the vines growing i the soil were crippled—they were frozen solid throug their trunks and had to start growing again fron underground protected buds.

But the White Riesling on the rocks were untouche by the cold spell.

"The summer of '85 turned out to be intense with heat," said Brian, "but a five-degree lower temperature wa recorded over the rocks than the surrounding soil. Pino Noir, Gewurztraminer and Chardonnay struggled agains deer browsing in trying to climb their posts. Several post rotted off and fell, but none did on the rocks. The Whit Riesling happily went about maturing its crop of grapes which started to sweeten in mid-August. Sugar levels wer reached quickly but acid remained at the bitter 1.2 leve for weeks. Ideal level is 0.7—then in late September som grapes began to shrivel and even though there had bee some earlier rain, the grapes didn't rot."

He decided it was time to pick the grapes he had taste and nursed along, but the night before the deer raided th vineyard and the shriveled as well as the perfect cluster were removed—not a drop of grape juice was left to tes or experiment with.

That fall, on October 10th, a hard frost took the vines on the soil as well as the additional cuttings in the nursery. Their leaves turned crispy brown in one day. Then he took a look at the White Riesling.

"To my amazement and delight, the White Riesling began to change slowly as the mature oak and maple trees were doing. The sun shone golden yellow through their leaves as they were put to sleep for the winter. The rocks were again working their magic, as they had those four frigid days in May—somehow the rocks had allowed the Riesling with their foot-long arms and forming crop to continue unharmed. Frost damage is supposed to occur at or below 30 degrees, and with no frost protection at all the White Riesling had survived and provided a crop as well..."

He said a further benefit of the rocks, as though the frost protection were not enough, was the weed-free ground over the rock terrain. Any gardener would appreciate what he's saying there. Encouraged by the friendly rocks, Brian planted an additional 1000 vines in the rocks and his vineyard is an incredibly beautiful sight growing as it does where once the unsightly dredger tailings littered the surface of that 20 acres.

Brian Helsaple is plenty pleased these days. "Below these 20 acres of rocks will be the roots of vines searching for water and nutrients to send to the grape. Roots that lay next to the gold that the dredge missed—it's not hard to imagine the unique flavor of wine that the plump grapes, ripened by sun and protected by rock, will produce," he says.

(This remarkable Siskiyou County resident is a 41-year-old designer and builder of anything practical and impractical (he says) and this includes all the implements for his 1937 Ford 9N tractor, as well as the screen printing equipment used in his business. By profession he's a technical illustrator, commercial artist and printer of items that don't move. His latest spare time project is building an airplane and hey, he says he's a great cook.)

All this and a bumper crop of White Riesling on the rocks! Here's lookin' at you, Brian Helsaple of Seiad Valley...

Design/Shery Larson

20

VITICULTURE CONSULTANT
TELEPHONE (209) 431-2166

VINCENT E. PETRUCCI
PROFESSOR OF VITICULTURE
DIRECTOR
VITICULTURE AND ENOLOGY RESEARCH CENTER
SCHOOL OF AGRICULTURAL SCIENCES AND TECHNOLOGY
CALIFORNIA STATE UNIVERSITY, FRESNO
FRESNO, CALIFORNIA 93740-0089

OFFICE TELEPHONE
(209) 278-2089
TELEX 9105501099 CSUFVITICULTR

21 OCT '90 ANGLER MOTEL

Discover

SEIAD VALLEY

Sciad, A Klamath Indian Tribal word meant

PEACEFUL

TRAVEL HIGHWAY 96

Historically known and dedicated

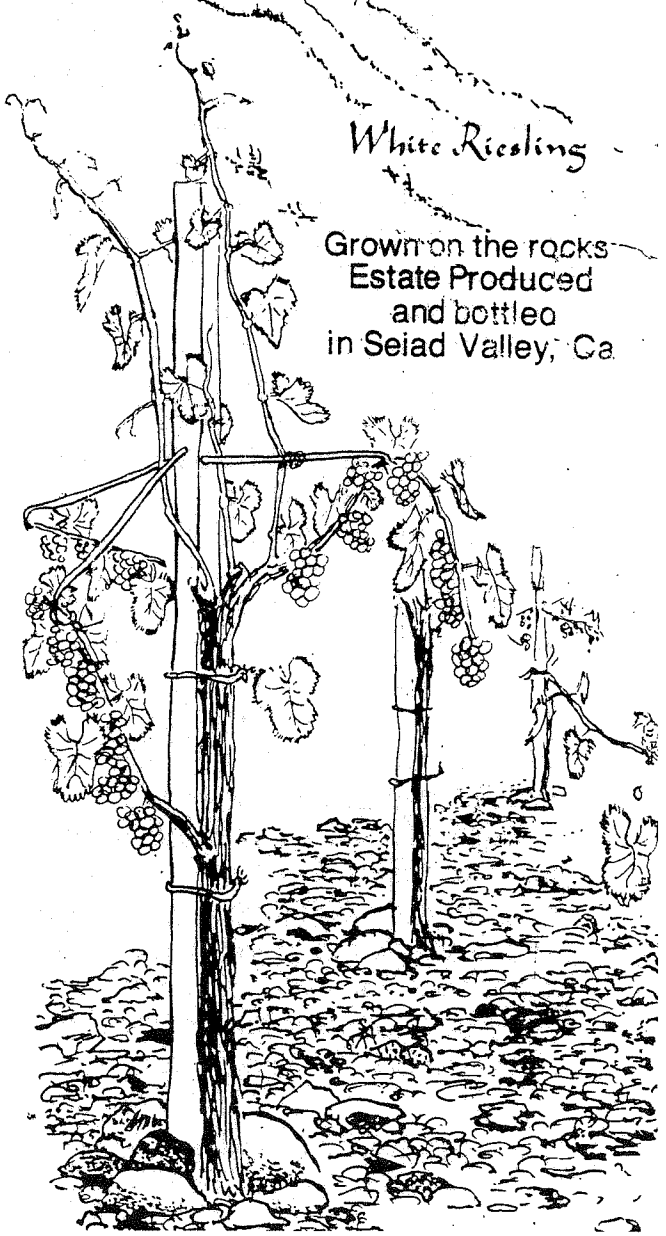
THE STATE OF JEFFERSON
NATIONAL FOREST SCENIC BYWAY

Merry Christmas
Brian

SEIAD VALLEY
VINEYARDS
P. O. Box 521
45013 HWY 96
Seiad Valley, Ca. 96086

SEIAD VALLEY VINEYARDS

SISKIYOU COUNTY



How many places in Calif. do you know of where the Riesling will grow naturally from seed?

Following the state highway 96 for 51 miles off I-5 the Klamath River cuts thru mountains and settlements that have seen mans activities at varying rates. From Indian tribes to gold mining, logging, fishing, rafting, tourism, retirement and back to gold mining. In the 1930's 3 story gold dredges turned up the valley floors and diverted the river in search for gold. Their destructive results are visable thru out Calif. as evidenced by disorganized piles of rocks called tailings. Without dirt little grows on these sites.

In 1986 the potential of the rocks to provide a new and sustainable industry, compatable with the area environmentally and returning to profitable production hundreds of acres of tailings. A test plot of 100 each of chardonnay, gewurtztraminer, pinot noir and white riesling were planted in this supposed region I area. Rainfall was measured, daily temperature high and low recorded and the effects of the environment on the vines.

The riesling survives today because of its tenacious hold and adaptability to the rocks. For 6 years no herbacide has been used to kill vegitation, nor has plowing been done. No frost protection has been needed as the rocks provide heat in spring and absorb the cold. During the heat of summer the air above the rocks is cooler than the air over surrounding ground. The HEAT stored during the day is returned to the air at night thus allowing fall ripening. No additional nutrients are given the vines because they thrive on the fertility/ infertility of the rocks. Powerdy mildew spraying is unnessary. Best of all the vine can be grown on its own rootstock, eliminating the need for special grafted rootstock. Thus the potential for true German Riesling would be possible if extraordinary care is used to prevent the phyloxera from infecting future vineyard plantings. (see the note under Vitaculture Potential)

A most exciting discovery was made in May of 1991. Vines began sprouting from seed dumped in the vineyard at the bases of parent vines. Previously, hundreds of pounds of lees had been put on the grounds besides the rocks but never a seed sprouted. It is assumed that the rocks are working mysteriously again to provide the proper environment necessary for the vines survival, similar to its native Germany. The importance of this should not be taken lightly. It is conceivable that a robin who steals a grape from the 1200 existing vines will drop that seed over another tailing pile in this valley and the vine will take over. The Alexander, Clinton, Norton and Catawba all came from seed dispersal. The natural spread of this vine on the rocks is inevitable here.

LAND

Siskiyou county is considered primarily agricultural. Housing and commercial developments are asked to take second place to agricultural practices on the building permit. Local land prices as elsewhere in the state are curruntly in a depressed time. However land and building values have remained lower due to distance and available limited jobs. A $50,000 home in this area is equivalent to a $250,000. home in the Bay Area. Commercial property lists for $12,000. an acre and is generally limited to highway 96.

A 70 acre parcel of rocks and pasture lists for $290,000 and includes

a 2 story, 5 bedroom, 2½ bath ranch house and a 24x48 2 story garage, shop.

17 acre, ½ pasture, ½ rocks lists for $54,000.
10 acre, ½ pasture, ½ rocks lists for $49,000.

all the above have Klamath River access and boundarys and were divided up to allow for homesites with views and river access. Price does not represent the vines ability to grow on the rocks which all previous people have till now wanted to bulldoze and cover with soil. Hundreds of acres exist that could be put into production. Pioneers are needed to show the potential of the rocks, they are patient.

MARKET

The nearest metropolis, Redding, is currently experiancing residential and commercial sprawl similar to Santa Clara Valley and Livermore. Redding could prove to be the closest provider of large volumes of tourists to partake in winery and vineyard tours. Redding is a dull, hot, 4½ hour drive from Napa. Seiad Valley is a scenic 3 hour trip past Mt. Shasta and down the Klamath River. The unbelieveable uniqueness of vines growing on the rocks would compel people to actually see for themselves, much like traveling to Calistoga to see the Geyser. Medford and Ashland, Oregon are a short 1½ hour drive North on I-5 and most of the river residents make the drive to shop there. Oregon has its own vineyards but none on the rocks. Oregon also has its own independance from Calif.

Most of the Klamath River is readily accessable for recreation, unlike the Sacramento, Napa and Russian Rivers. At virtually every mile along highway 96 the river can be visited for picnics, getting feet wet or just watching birds or the river move by.

The residential population of Siskiyou county is a small 44,459. Though this number is tiny compared to most cities, these residents consumed 34,000 gallons of the re-established Etna Brewrys yearly capacity. This is in addition to the millions of gallons of traditionally canned and bottled beer. The Brewry is currently establishing distributorship in Redding to tap into that cities consumption.

A small operation to make wine from bruised apples is currently also being established in the Etna area. Etna has a population of 750.

The establishment of a winery in this area would be looked upon most favorably by residents and county government. The county will encourage the growth and possibly aid in the development of the acceptable use of land both for vines and winery establishment.

The author is intent upon building a Winery to enable the legal sale of his limited 200 gallon capacity. At this point there is tremendous opportunity to educate the consumer and to that end will the winery be designed. The land is zoned for manufacturing and bottling and is bounded by highway 96 and his vineyard. He intends to be active and instrumental in this areas establishment as a vitaculture region.

For any answers to questions please write or call Brian J. Helsaple

p.o. 521
Seiad Valley, Ca
96086

(916) 496-3325

VITACULTURE FOR SEIAD VALLEY

Seiad is a protected valley in Northern most Calif.
Heat units measured over a 6 year, daily, period= 2426 degree days
Similar in climate to Germany, 1350 foot elevation, some snow in winter.

Varities tried= Pinot Noir, Chardonnay, Gewurtztraminer, Merlot
Semillon, Mueller Thurgau and White Riesling

The "Oregon Grape": vitis californica is native.
Thompson Seedless will produce if frost protected.

Recommended varities to plant on the rocks: White Riesling, Semillon,
An experimental plot for Sauvignon Blanc could be attempted but wasn't.

Frost protection is provided by the rocks.
No weed control is necessary. Insignifigant Powerdy mildew if any.
Deer do not ordinarily venture onto the rocks till late harvest.
Robins are a pest the week before harvest. END OF SEPTEMBER
Ripening is prolonged by the heat stored in the rocks but fall rains and picking of late harvest reduces sugar and increases acid if delayed.

Watering is used to establish deep penetration of roots the first 2 to 3 years beginning in June till October 1st. Apply water at a 1 inch rate over a 12 hour period. Example: 2 sprinklers putting out 300 gallons per hour will water 1 acre in 11 hours if moved each hour. Water every ten days.

Plant rooted cuttings on leveled or rolling tailings in rows 7 feet wide every 6 feet along with a 6 foot 2x2 post and 1 scoop of soil.

An alternate to the post per vine would be a stretched wire at the ends of each row. This prohibits rolling tail planting unless provisions are made.

Yields from this 1012 vine planting will vary from 2 to 3 tons the 3rd year. The character and quality (over quantity) as the vines send roots deep past missed flakes of gold make up for the low yield with each delicate sip. (well, I think so!)

Costs: Leveling the rocks $350. per acre
Ripping rows $ 70. " "
Cuttings $102. " "
* Posts varries with choice

Maintenance requires training vine up post, pruning in winter of old bearing wood and tieing new arms to prevent wind damage. A timely tip pinching and sucker removal in spring promotes optimum vine growth.

The use of grafted rootstock on the rocks was not tried. The root louse phyloxera is not present in the valley. If it is the vines may again be receiving mysterious protection from the rocks. After all, the pest may simply not want to live out there.

To provide for protection, cuttings will be supplied anyone for no charge from the existing vineyard. These have proven themselves for 6 years. If enough intrest is expressed rootings will be made available at minimum expense of their removal from the rooting medium.

* Posts should be cedar. these last longest on the rocks. If fir posts are used they should not be treated with any preservative.

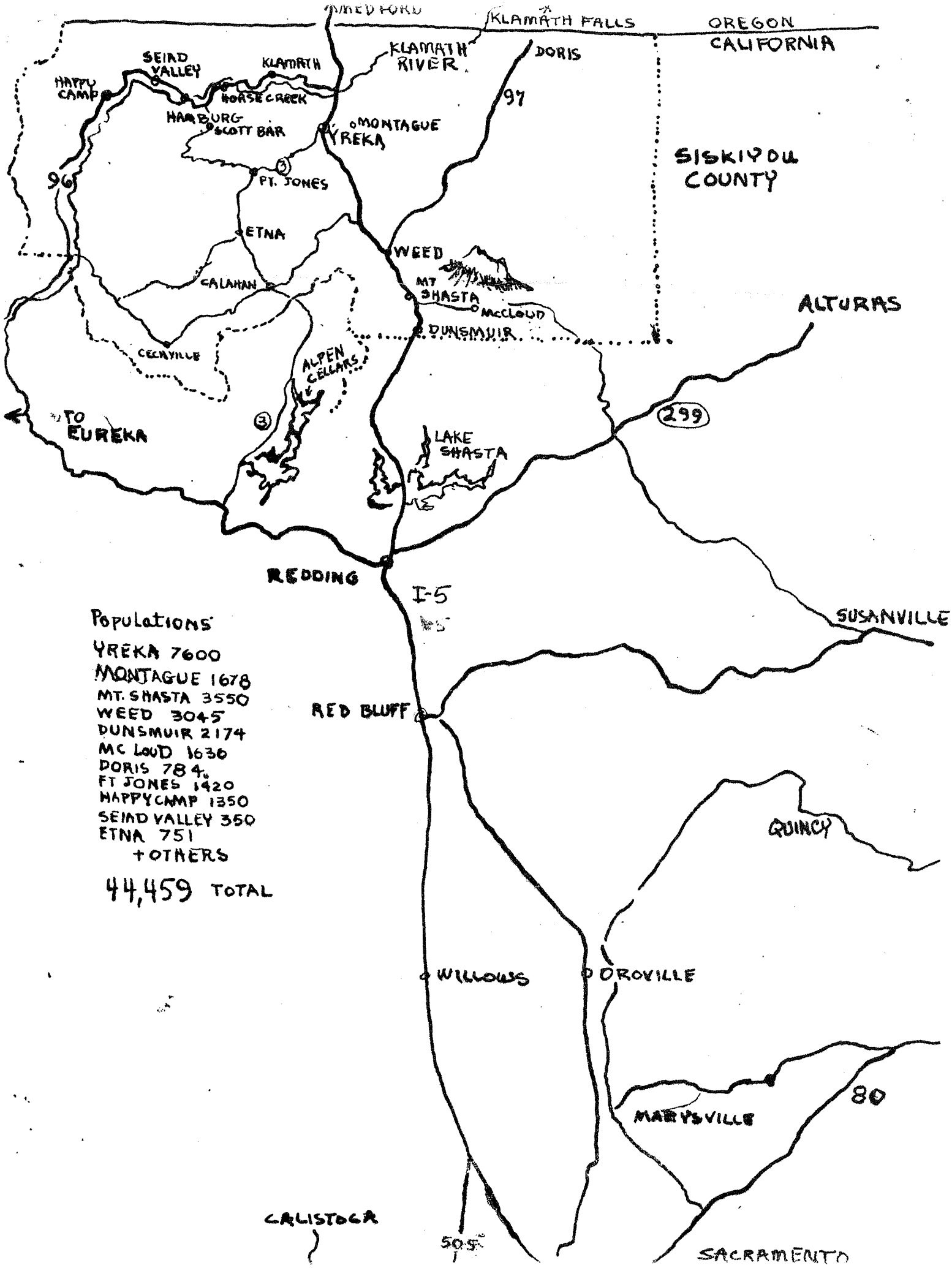
please contact Brian J. Helsaple, P.O. 521 Seiad Valley, Ca 96086
(916) 496-3325

Humbug Creek
GOLD DREDGE
1940s

1978
FUTURE POND
AND VINEYARD
SITE HOUSE'S RT SIDE
& WINERY LEFT

FUTURE HOUSE

1st years ROOTED
CUTTINGS - 1984



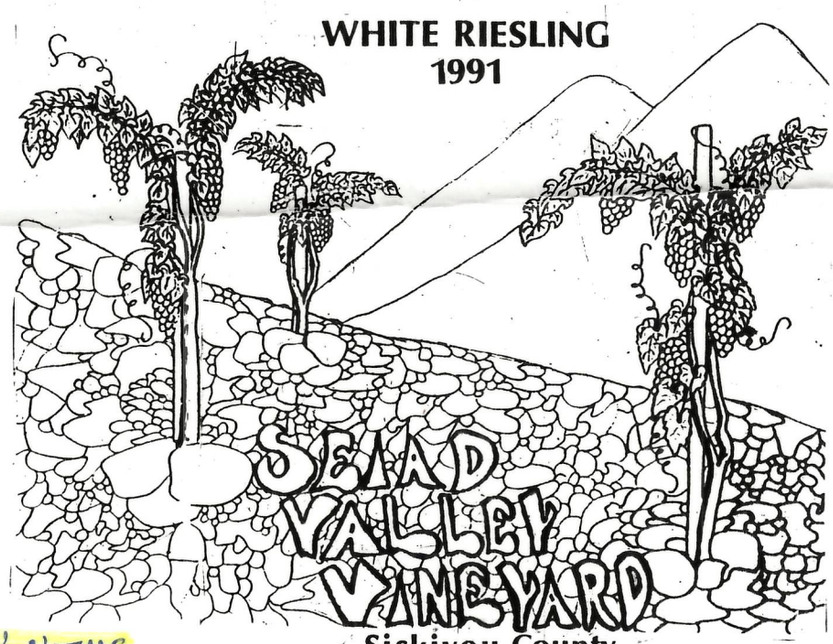
Populations

YREKA 7600
MONTAGUE 1678
MT. SHASTA 3550
WEED 3045
DUNSMUIR 2174
MC LOUD 1636
DORIS 784
FT JONES 1420
HAPPY CAMP 1350
SEIAD VALLEY 350
ETNA 751
+OTHERS

44,459 TOTAL

Evidence:

The below article resulted with contact of Norman Grencius Apco Screw Products, 9410 De Soto Ave., Chatsworth, Ca 91311 and Joe Hafferty, 10148 Hanna Ave., Chatsworth, Ca. 91311. Both are members of the Cellermasters Home Wine Making Club of Southern Calif. They wrote and requested the availability of my riesling for experimentation. Six people traveled 14 hours on Sept 24, 1991 from S. Calif to harvest 1500 pounds of grapes, 800 miles north. They processed grapes into juice and returned to S. Calif with 140 gallons ready to ferment. Upon completion I hand screen printed their lables while they bottled. They entered 1991 Seiad Valley Vineyard, Siskiyou County White Riesling in the following Competitions: 92 Lodi Springfest, Cellermasters Springfest, Orange County Fair, Calif. State Fair, Ventura County Fair, And Los Angeles County Fair all in 1992.



SISKIYOU DAILY NEWS
20 JUNE 91

...mout ...eka, ...ling ...own ...er, ...cle ...lle,

National Forest-USFS) reports response to the following calls:

- California Department of Forestry: wildfire, small lightning fire above Gazelle.
- Lake Shastina Fire Department, assisted by Mount Shasta Ambulance, Lake Shastina Police Department: medical aid, possible stroke.

Kenneth E. Scoggin, 65, Weed, and Dorothy F. Richards, 65, Gazelle. License issued June 18, 1991.

William R. Simmons Jr., 27, and Stephanie L. Smith, 23, both of Springfield, Ore. License issued June 19, 1991.

Donald M. Baber, 23, and Donna J. Thomas, 29, both from Weed. License issued June 19,

CORRECTION

In the Monday edition of the Siskiyou Daily News, an error occurred in the Marriage listing of the Records. The correct entry reads as follows:

Douglas J. Hall, 24, and Melissa M. Dunham, 23, both of Montague. License issued June 12, 1991.

Helsaple plans winery in Seiad Valley

MARCIA ARMSTRONG
Daily News Features Editor

SEIAD VALLEY — "The roots are seeking out the gold that the miners didn't get," said Brian Helsaple, explaining the special quality of his Riesling wine.

Years ago, he obtained root stock from Oregon, planting the stock on a "rock pile" of gold tailings as an experiment. The stock adapted and began to flourish. Six years ago, Brian produced his first Johannesburg Riesling white wine.

Using an old style wine press, Helsaple hand-makes his wine in the traditional German manner. He says that he learned his method from researching books on the topic.

Helsaple recently received a visit from the head viticulturist at Fresno State University, who toured his operations and sampled his product. Helsaple said a wine expert called the "character" (quality, acidity and sugar content) of his wine excellent. The mountain climate of Seiad is apparently similar to the area of Germany where the grape originates.

Apparently the areas of Seiad Valley, Horse Creek and Hamburg are ideally suited to the production of Riesling grapes. In addition, the Klamath area is "clean" from the phylloxera insect that has infested other wine-producing areas.

Last year, Helsaple enlisted the aid of local volunteers to handle the burgeoning 3000-pound crop. In appreciation for their help, he gave them novelty tee-shirts printed with "Sciad Valley Vineyards," (using the traditional spelling for the area.)

This year Brian anticipates a volume of 4500 pounds. The dream of building a winery has begun to seem possible. "I have to do something with all that wine," he said.

Winding his way through the maze of bonds, permits and licenses, Helsaple is doing the footwork to make the dream a reality. "This could be big for the local economy," he said. "Imagine tourists traveling downriver to the winery, enjoying the scenery."

If all goes smoothly, Helsaple hopes to open the Sciad Valley Vineyards winery next spring. If his hunch is correct, the Klamath area may blossom like Brian's Riesling grapes.

5.

CALIFORNIA STATE UNIVERSITY • FRESNO

SCHOOL OF AGRICULTURAL SCIENCES AND TECHNOLOGY
CALIFORNIA AGRICULTURAL TECHNOLOGY INSTITUTE
Viticulture and Enology Research Center

2360 East Barstow Avenue
Fresno, California 93740-0089
(209) 278-2089

May 7, 1992

Mr. Brian Helsaple
Seiad Valley Vineyards
P.O. Box 521
45013 HWY 96
Seiad Valley, CA 96086

Dear Brain,

Thank you for your letter, it was good to hear from you.

The sprouting of vines from seeds is a natural occurrence where pomace is spread on the soil. These "seedlings" will resemble their parents, but 99% of them will be inferior to their parents. Hence, you have less than 1% which would be better. However, this is a way new variaties are discovered and you may be lucky enough to have this rarity happen.

Oregon is a good place to grow grapes but will never overtake California. They as well as Washington grape growers are subject to complete wipeout (frozen vines) in any given severe winter freeze which doesn't occur in the "traditional" vineyard areas of California.

I wish you well and congratulate you for your fine efforts at Seiad Valley Vineyards. Next time I pass your way I will indeed stop by.

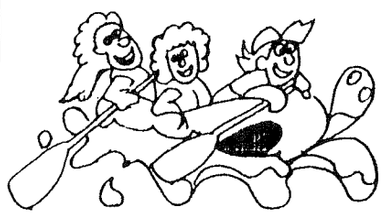
Sincerely yours,

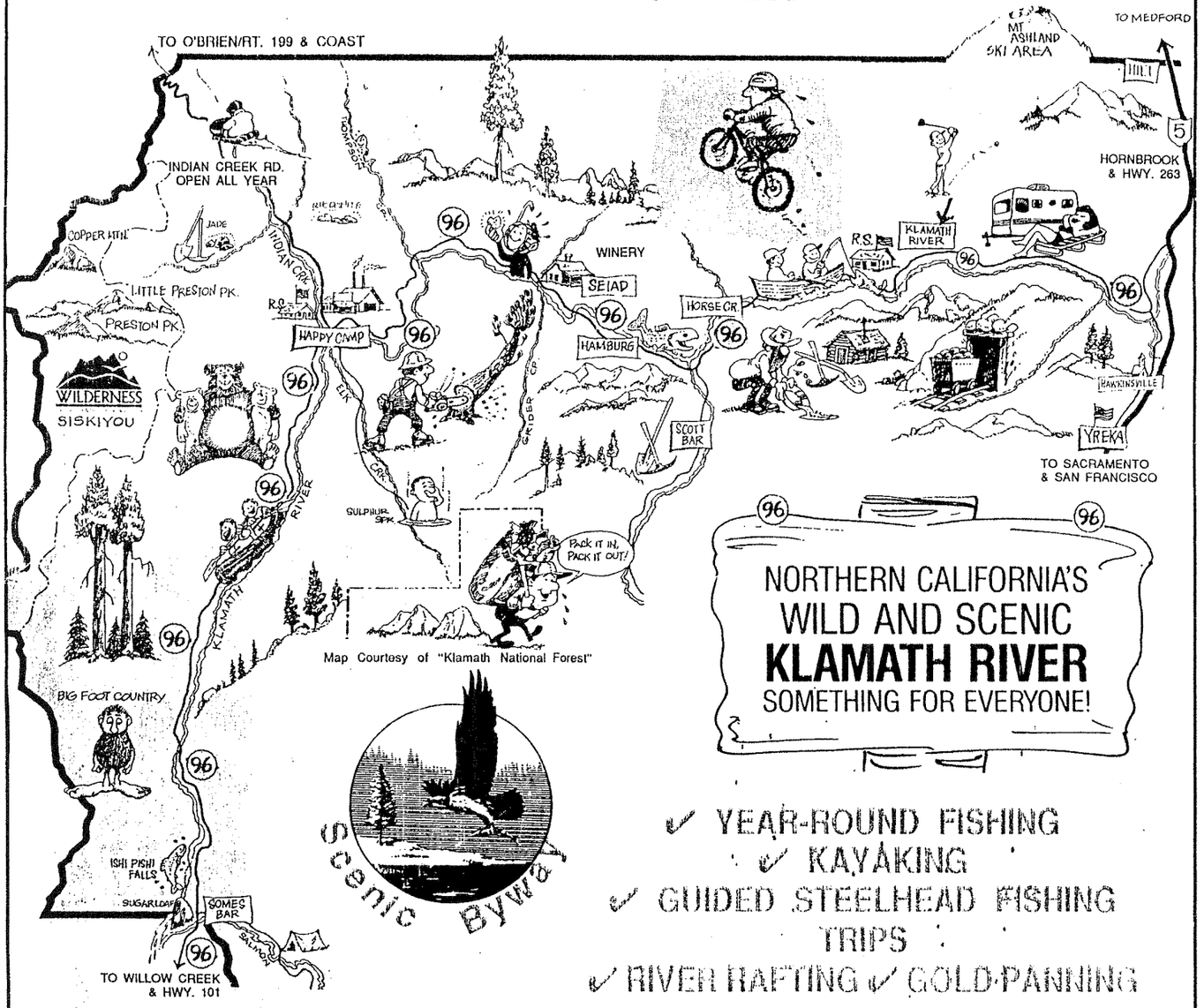
Vincent E. Petrucci, Director
Viticulture & Enology Research Center

GC2:5VEPMAY.92 WS5/5.25

HIGHWAY 96

Gateway to ADVENTURE!!



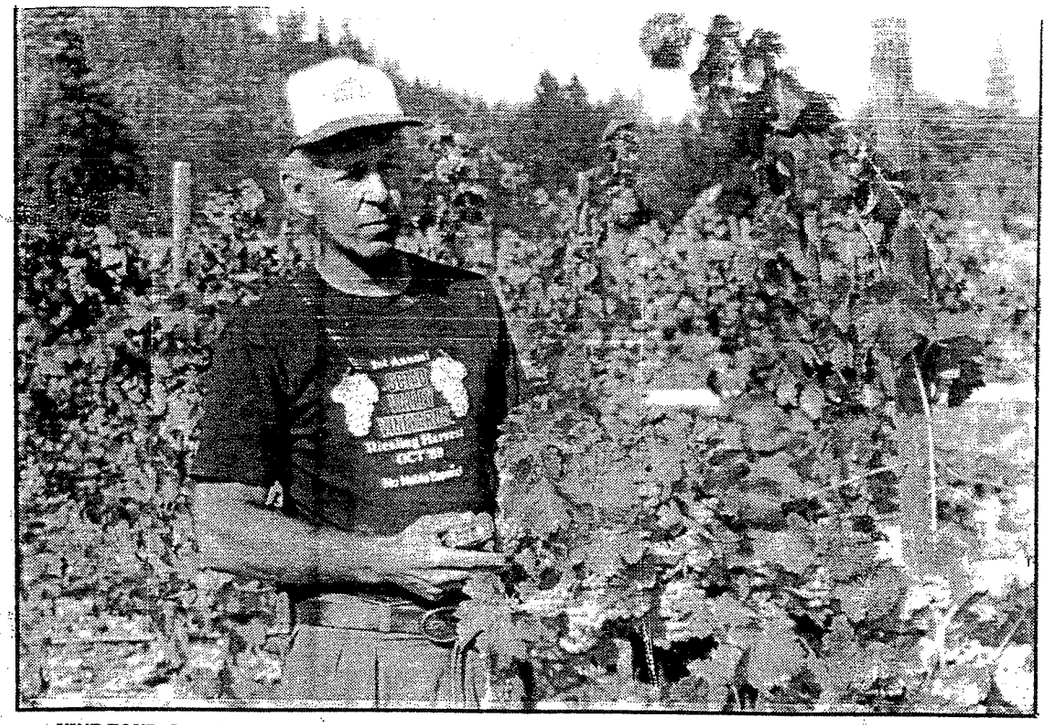


NORTHERN CALIFORNIA'S
WILD AND SCENIC
KLAMATH RIVER
SOMETHING FOR EVERYONE!

✓ YEAR-ROUND FISHING
✓ KAYAKING
✓ GUIDED STEELHEAD FISHING TRIPS
✓ RIVER RAFTING ✓ GOLD-PANNING
✓ CANOEING ✓ BACKPACKING ✓ HUNTING ✓ PHOTOGRAPHY
✓ WILDLIFE ✓ SIGHTSEEING ✓ BIKE ROUTES
✓ MOUNTAIN BIKING ✓ GOLFING

For more information contact:
Northern Klamath River Chamber of Commerce, P.O. Box 25, Klamath River, CA 96050 or
Happy Camp Chamber of Commerce, 63714 Highway 96, Happy Camp, CA 96039.

PAID FOR BY NORTHERN KLAMATH RIVER CHAMBER OF COMMERCE HIGHWAY 96 COMMITTEE



VINE TOUR--Brian Helsaple stands among his vines of reisling white grapes which have provided start for local winery.

Rock-pile grapevines surprising all experts

SEIAD VALLEY--Friends and volunteers gathered Saturday and helped Brian Helsaple bring in the grapes at his vinyard located along Highway 96, in fact, more than 4000 pounds of them.

What's perhaps is most unique about Helsaple's Seiad Valley Winery is that his reisling white vines are grown on old mining dredger tailings, what looks like a smoothed-out pile of rocks, which it is.

When Brian and his brother Tom bought the 64 acres more than a decade ago, it was the mining remains they probably wondered the most about in terms of potential.

But those granite-dominated rocks also may give Helsaple just the edge he needs to be the county's first successful longterm wine grape grower. In fact, he's so confident he can be "consistent" with his production that he's in the late stages of obtaining county, state and federal permits to provide a small, roadside winery along Highway 96.

What's stopped the area from becoming a wine-producing area are the erratic late spring freezes in the zone where elevations are low enough to even make it possible. And in some of the county's lowest elevation areas, the precipitation levels are too high.

At amatuer wine making for about a decade, he started his interest in grape production about a half dozen seasons ago. He ended up buying four types of grapes suggested by the extension service for high elevation survival, and one has proven most successful, the reisling.

Helsaple had noted in his readings that the reisling took well to the soil-poor areas of Germany where slate predominated. Thus bloomed the idea of using the rocky tailings area, though at first glance it seems

Continued on Page 7

OVER

Deer hunting season to open this Saturday in most areas

REDDING--Deer hunting season for most local areas starts Saturday with prospects predicted to be "improved" over the last several years according to the California Dept. of Fish and Game.

The Sept. 19 opener includes the B6 Zone which includes Scott Valley, a change in designation from the previous label of D1.

The continuation of the drought will also play a part, because hot and dry

preclude an open campfire, for instance, and smokers must be extremely careful. Some areas have winter road closures as well, but the agencies try to keep as many roads open as possible until the end of the hunting season.

Any hunter which purchased a "B" tag is part of what is known as Big Green, which gives expanded options for locations in which to seek a buck, and brings with it the possibility of winning a

PIONEER PRESS
serving western siskiyou county
Vol. 20, No. 45 Wednesday, Sept. 16, 1992 50 Cents

Balloon event

benefit.

He said although FmHA has no basis for denying preapplication, the loan evaluation process continues through the approval stage and "any relevant new information will certainly be given careful consideration."

In a "note to file" attached to FmHA correspondence dated July 9, 1992, it is suggested that previous to that date, a Robert Longman from the FmHA California Office was not aware of any public opposition to the Etna project and he felt that the state should take a look at the preapplication package that had been received in the national office of the FmHA.

According to the note, the state was ready to issue a loan preapplication form but "will hold off until the petition and other materials have been reviewed."

According to FmHA records, Young has participated as a principle in 20 other FmHA projects in California dating back to 1980.

New program by power firm

YREKA—Customers of Pacific Power have been invited to participate in a new home energy efficiency program. Announcements of the program are now appearing in residential electric bills in Scott Valley.

"The energy audit is much more thorough than in past residential programs," said Sally LaBriere, home Comfort manager. "We've found over the years that significant energy loss occurs from air leakage, but to discover the leakage requires high tech equipment, such as a blower door and infra-red camera."

LaBriere says to find out more about the program call her at 842-8629 or return the coupon from the mailer to Pacific Power's office at: P.O. Box 248, Yreka, CA. 96097.

FLEA MARKET--The sister-brother team of Anne and Mitchell Eastlick were among the people in at Saturday for the Annual Greenview Flea Market. More than 1500 persons attended the annual event.

GRAPES

Continued from Page 1

deplete of anything other than rocks.

Since then, he believes the success of his reislings production wise has been due to the fact that the rocks are heated by the sun during the day, radiate at night, and even aid in the circulation of air and humidity.

Contrary to popular opinion, grapes are a species which thrive on adversity. The only problem he's had this year is some change of color on some of the leaves, which he thinks might be the result of the lack of natural flushing of salts because of the drought.

Despite the big haul which saw about 30 people at one point staking grapes everywhere, Helsaple's real goal this year was not quantity, but quality, and he thinks "1992" might be a great year once he gets his permits and can start his official winemaking chores.

"The balance of sugar and acid is just right, "it's pretty exciting to me."

Helsaple is a 47-year-old sometime repairman, sometime T-shirt maker and master of gerry-rigging who looks over four rentals on the family property, and slips away to fish when he can. He's also deep into fashioning in his garage a kit-built airplane.

But the vines have been become the main focus for this bachelor, with pruning in the winter and what he calls "pinching" in the spring when he keeps is vines from spreading out as is their inclination.

Saturday's grape gathering took on a festive atmosphere as he shared three dozen cookies he baked and had one of the folks in attendance slice up a pork roast he took out of the freezer.

Some of the town's younger teenagers and some girls about 9 or 10 then helped solve the bottleneck at the crusher by stomping a vat of grapes with their feet. "They seemed to having a great time," said Helsaple.

"It was such a rewarding feeling to see how the whole community pitched in, that people were here not for some award, but just to do something for a neighbor."

Helsaple's helpers in some cases, of course, were people he had helped, particularly with his mechanical and electronic flair, not to mention his artistic talents.

The son and grandson of construction workers and contractors, Helsaple came to mechanical inclination naturally, as did his brother and two sisters.

A "weakness in math" steered him away from an engineering direction, but after a stint in the Air Force in Vietnam, he ended up graduating from college with a degree in technical illustration.

That led to a job as a designer of T-shirts, and his love of fishing led to a line of fish transfers which he illustrated and marketed, but only "broke even" with financially.

He still dabbles in T-shirt design, and his most recent is a shirt he's making for the Northern Chamber of Commerce which will be sold at the Balloon Fair, so the area can get more business in future years.

"It's been mostly logging around here, but that's fading." said Helsaple. "Seiad needs something, and I'm hoping the winery when it's operational by next summer will be a part of that."

SAT preparation course given at Redding school

REDDING--California State University, Chico is offering a two-day SAT Preparation Workshop at Enterprise High School, Redding, Room 63, on Saturday, Sept. 19 and Saturday, Sept. 26, from 8:30-2:30. The cost is $95 which includes materials. The instructor is Gail Pearlman. Preregistration deadline is Sept. 16.

take the SAT, this intensive two-day preparation course can help students make the most of their time and skills. The course will emphasize verbal concepts tested on the SAT, focusing on vocabulary skills and a breakdown of the different kinds of analogy, antonym, reading comprehension, sentence completion, and TSWE questions.

Rebeka host sta top offi

YREKA--Committe pointed at the Aug. Hope Rebekah Lodg ths visit of state Carolyn DeBoer of th Rebekah Assembly on Sept. 2.

Deputy President I ton stated there wo host dinner at preceding the meeti commodations were president and her pa motel.

Committees incluc room, Bea Sorth Nelson; lodge room room decoration, Fl chairman and Virgin ons, Fanny Nelsen of

Those wanting to dinner should notify ton.

Refreshments will following the meetin Hanner, Anna Merri Barbara Gravelle.

The July-August Odd Fellow paper st Fellow-Rebekah Lod thern California raise the Arthritis Founda California led all the United States in men this past year.

During Good of t past District Deputy District 69 were esc altar and presented Flag pin by the nob honored were: A Brown, Edith House Nelsen of Weed; Fl Frances Morton, Bea jorie Klander, and I of Yreka; and Velm Mount Shasta.

Country Trying st to New Era

Ginseng and garlic farmer Mike Johnson and his wife, Tricia, and daughter Gretchen used a cable car to cross the Klamath River

PHOTOS BY THE CHRONICLE

Brian Helsaple cleared the land at his Seiad Valley Vineyards, where the rocky soil nurtures grapes that he turns into Reisling wine

BY THE CHRONICLE

Mike and Tricia Johnson hoed weeds in their garlic patch on a ridge above the Klamath River

☑ LOGGERS REAP GARLIC, GINSENG

Timber Country Tries to Cut Losses

By Michael McCabe
Chronicle Staff Writer

Seiad Valley, Siskiyou County

The woods are quiet in these parts nowadays. Long gone is the sound of 42-inch-long chain saws felling massive Douglas fir. Huge logging trucks that used to barrel down Highway 96 in convoys only 10 years ago are now as rare as Bigfoot sightings.

The decline of the timber industry in Northern California over the past decade is changing the landscape in ways barely anticipated when it began. Thousands of timber workers and others in related fields have lost their jobs — and a way of life — because of the recession, the drought and environmental restrictions on federal forests.

As the mills and pulp producers have closed down, some families have been scattered. In increasing numbers, lumber industry workers drive long distances to find work in other parts of the state, return to school after decades to learn a new trade, go on welfare or pack up and move away from their beloved forests.

"It's fast becoming the Appalachia of the North," said Dennis Crozier, 46, a laid-off Simpson Paper Company electrician who has lived in the Eureka area since he was in the third grade.

Others are fighting the battle on a different plane. A small but growing number of backwoods entrepreneurs and latter-day pioneers believe they know new ways around these woods. Many

TIMBER: *Page A6 Col. 1*

the timber industry to retrain for other kinds of work, most people up here say. Some, out of desperation, gather pine cones in the forest for sale. Others harvest herbs or gather up sticks covered with green moss for sale to floral designers. But that is unlikely to be a permanent solution for the vast majority who have been forced to abandon a skill they have honed all their lives.

"Foraging is a great idea, but the same constraints facing the timber industry will also face anybody who needs access to the national forest to gather things," said Nadine Bailey, vice president of California Women in Timber, who ran a timber company in Hayfork with her husband until it shut down last year. "I think some loggers can be retrained, but most of these men have a tie to the land that is much like what a farmer feels for a farm. I see these guys leave trying to do something else, and five years later they will be back in logging. It's a relationship, not a job."

Others are willing to try something new and different, no matter what the odds. Gene Cox, 49, of Happy Camp, used to operate a 3½-foot-long chain saw until the logging industry virtually came to a standstill in these parts. Since last summer, he has been growing exotic mushrooms in a former tire-recapping shop owned by his partner, Jim Blair.

"It was either mushrooms or welfare or move elsewhere," said Cox, who grows several kinds of mushrooms, including a pink oyster variety, and sells them to health food stores and restaurants, chiefly in the Bay Area. "The government mismanaged the forests all these years and still can't come up with an intelligent logging plan. It's not just the spotted owl, it's biodiversity that needs to be emphasized, and mushrooms are part of that biodiversity. We use the climate, the sawdust and hardwood logs to grow mushrooms. It's all here."

But while Cox said he can't keep up with demand, his mushroom business is in trouble because he and Blair need a quick infusion of capital to expand the business to the point where it can be profitable.

> ***'Most of these men have a tie to the land that is much like what a farmer feels for a farm'***
>
> — NADINE BAILEY, CALIFORNIA WOMEN IN TIMBER

"I figure we got only two months left," said Blair, 40, who still runs his tire business next door to the mushroom business. "I don't sleep at night and my blood pressure is so high I'm afraid I'll pass out. We need a new spirit up here."

A New Dynamic

Others are betting that some sort of dynamic will emerge between tourism and other micro-industries.

One of those people is Brian Helsaple, who feels a kinship with the pioneers who settled the fertile Santa Clara and Napa valleys, specifically those who grew and made wine. His Seiad Valley Vineyards on Highway 96 is the northernmost bonded winery in California. He makes a crisp white Riesling from vines he nurtures in the rocks outside his home. But like many other struggling entrepreneurs in Northern California, he wishes government officials would do more to nurture the business climate.

"In order for this remote area to develop, grow and provide for the few of us who choose to struggle here, we have the additional burdens of federal, state, county and city officials to satisfy," said Helsaple, 47. "The sad part is there doesn't seem to be an intelligent plan to deal with the forest that will satisfy both the environmentalists and the loggers."

Others say the deep division between the environmentalists and the timber industry makes it difficult to come up with a united strategy for the future.

"Trying to get things done is difficult because of the polarization," said Barbara O'Neal, a coordinator for the Center for Environmental Economic Development, a new organization in Arcata that is trying to create permanent, environmentally sound jobs. "We want to study the feasibility of reopening part of the Simpson Mill as a recyling plant. But many people around here see the word 'environmental' in our name and they go through the roof."


OREGON
RED BUTTE WILDERNESS
WEST BRANCH
CREST TRAIL
WINERY
PACIFIC CREST TRAIL HEAD
NATIONAL WILD AND SCENIC KLAMATH RIVER
GRAYBACK ROAD. HIWY. 199 TO THE OCEAN, CAVE JUNCTION, ORE. CHECK ROAD CONDITIONS
FORT GOFF
SEIAD VALLEY
BEAVER CREEK
KLAMATH RIVER
HORNBROOK
Klamath River
HAPPY CAMP
CURLY JACK
O'NEIL CREEK
SARAH TOTTEN
GRIDER CREEK
96
9
TREE OF HEAVEN
263
COLIERS REST AREA
GOLF
HORSE CREEK
SCOTT BAR
SULPHUR SPRINGS
HAMBURG
16.5 M
NORCROSS EQUESTRIAN TRAILHEAD
DILLON CREEK
Scott River
YREKA
JEFFERSON STATE SCENIC BY-WAY
SISKIYOU WILDERNESS
Klamath River
MARBLE MOUNTAIN WILDERNESS
5
ISHI PISHI FALLS
OAK BOTTOM
SOMES BAR
PEARCH CREEK
ORLEANS
TO FORT JONES
TO REDDING, SACRAMENTO.
PACIFIC CREST TRAIL
TO WILLOW CREEK, THE OCEAN AND HIWY. 101
CALIFORNIA
FORJAX©