THE TULANA FARMS DREDGE
By Susan Rambo

On March 27, 1997 Thurston Henzel was a guest of the Klamath County Historical Society. He recalled his life aboard the Tulana Farms' dredge:

(Thurston Henzel)

"The one individual that knows about the dredge is Bill Wales. He was a civil engineer. Bill worked quite extensively with my uncle, Dick Henzel, in the plans and in the preparation of the dredge. I thought maybe I'd be able to talk with Bill, but he's out of town.

"It's been twenty-five years since I've been on board. I remember well what it looks like. I'm sure that the people that own the dredge are going to restore it. And it will probably be beautiful. And I'm certainly glad. We should all appreciate the Campbells taking ownership of this dredge. It was a race between the salvage man and someone who wanted to turn it into a museum.

"All dredges are named. This is Dredge Tulana. It was built in the early 1950's. It probably took about a year and a half, to two years to build it. I was nine years old when it was built. I remember my dad taking us up there as kids to see the construction of the dredge. It was built on the lake. It was built at Pelican Bay, by the old Boy Scout Mill, which is by Harbor Isles today.

"It was built on land, piece by piece. The intent was to remove the chocks and it was gonna slide down into the water. It didn't do it. My dad, I can remember, I don't know whether he's worried or whether he's disappointed, but it didn't go into
the water. So, at that time, there was a couple little tug boats on the lake to pull logs and they brought in one of these little tug boats and they hooked her on and they took out there churning up the mud. They gave up and everybody went home.

"So, one day, my dad come home, he says, 'Well, the dredge is finally afloat.'

"I'd like to just spend just a little bit of time explaining to you what the dredge was like and why they needed the dredge.

"My uncle was Dick Henzel. Dick and Ben (Henzel) purchased some property north of Klamath Falls. They named it the Williamson River Ranch, the Williamson River Properties. They could see the development that was needed. They could see the future in this piece of ground. My uncle owned a little bit of some farm dirt, but I don't think that he enjoyed farming very much. He actually enjoyed land reclamation more than he did the farming business. He could see the opportunities up north. They purchased this property with the intent of developing it.

"But, they could see the need for the dredge. They knew the dredge, the importance of it. Now there has been several dredges on the lake. This isn't the first. There was an old dredge, the Copco dredge. It was the California Oregon Power Company dredge. They were trying to dike the lake, but it was just too small of a machine to do the job. So they realized they had to engineer it where they could build it and put it there, to where they could do the job.

"The bucket, right now, is under water, so you can't see the bucket. There's a boom, sticking out. Hooked to the bucket, is a little piece of cable, about a half inch cable. It's called a tag line. A tag line is what stabilizes the bucket or scoop. The bucket will swing. But there is a counter-weight on the end of this tag line, that weighs about 700 pounds. And that's what stabilizes that bucket. In the winter time, when there is ice on the lake, about 12 to 14 inches of ice and you're coming out with the bucket, that ice will float over your tag line. You don't want to break that tag
line. You've got to be really careful that you don't break that.

"The big thing in the front, that's called the whirlly. On part of the whirlly is the gantry. The gantry sticks up in the air and that's what holds the boom up. And those strange things on the side, that you see sticking up, look like trees, there's two on the right and two on the left. Those are called spuds. And the spuds, that's what holds the dredge in place, while it's operating, where it doesn't move from side to side. They hold the dredge in place, but they also are what make the dredge move. The dredge has to move and they were moved by the spuds.

"This cabin-looking thing. That's where we lived. In the very front part of it, is the machine area. That area is full of winches. Those winches in there are pretty good size. They take up the whole front and those winches are what raises the spuds in the air. It's all done by cable and the cable all runs underneath the deck, and there's pulleys all through underneath the deck. When you flip on the switch, it's all done by electric switch, those cables move, those spuds will rise.

"There is two diesel engines in there and those are generators, there is two diesel generators that supply electricity to the living quarters. There is a boiler in there. It's a steam boiler for the heating system. An old times boiler, like you find in the old houses, heated the hot water, ran through the dredge like a radiator system, and that was for heating in the winter time.

"There is a complete machine shop located in that area. Welder, cutter, drills, everything a person needed to make on-board repairs. Just like having a shop. If you needed to do something, you had the tools to do it with.

"The living quarters. There was space for 12 people. There's five rooms upstairs. Two bunks to a room. There's a restroom, shower. Downstairs is the dining area. A galley. And one two-man bunk downstairs with restroom, shower. Basic, but very nice, very well done.

"Now what you don't see from the outside, is a ten thousand
gallon diesel fuel tank located underneath the deck, between the
whirly and the machine shop. There's a five thousand gallon
water tank. Of course we do have the main deck which everything
sits on.

"It takes about three and a half feet of water to float the
dredge. After they constructed the dredge, they noticed the top
deck started to buckle. So what they did was reinforce the
deck. That's one problem that they found that they had in their
original design. They put some of these massive plates on the
side, on the deck.

"In the deck there's compartments underneath. One of these
compartments is flooded for balance. For information sake it's
to the rear left.

"What does this dredge do? It does one thing: it moves
dirt. That's all it does. It moves dirt. It does it with a
clam-shell type bucket. It moves dirt the most efficient way
known. You can move more dirt with a drag line and a clam-shell
bucket than by any other means. The only trouble is, you can't
move it very far.

"They manufactured two buckets. One bucket is the light
bucket, holds about eight yards. That's for working in the soft
mud along the lake. They manufactured a second bucket which
weighs about six tons. It doesn't hold as much dirt. It holds
about four yards. They used that bucket when they were working
the Williamson River. Because that's harder dirt and they
needed that heavier bucket to crash through the harder material
in those certain areas.

"There's two cables, to put them on with this bucket. One
which is called the hoist cable and that one cable is what
raises and lowers the bucket. The second cable is what opens
and closes it.

"The whirly has two big caterpillar engines. One
caterpillar engine operates two drums, that controls these two
cables. One generator makes electricity and makes it swing.
The swing is all done by electricity. The operator station is
that tower that you see on the right side of the whirly. It's
30 to 40 feet above the deck. It's glass all around it. You climb up the ladder, you will see a little stool in the center. All it is, is just a little stool you kind of squat on. In front of you, you're gonna see two little control handles, just about the size of this microphone. There's two of them. They run, you pull it back and that's what controls the cables. On the floor is two brakes. You put your foot on the brakes. The right hand is on the hoist to open and close. The left hand, there's a mechanism, just a little handle, you push it forward and swings left, bring it back, swings the other way. I was backwards on that. It's that simple. The average person can learn how to run it in about half an hour. It's tedious. Your back would get hurting so bad, you'd want to cry. But it's a job.

"My uncle was worried that they would take too much material and stack it up. But, what he's afraid of is that if we were to take too much material from the front of the dredge and stacked it up on top of the levee and with the weight, the levee would come back into the hole, so what we actually had to do, was we positioned the dredge up river. We made one lip in, we covered up, and then we went back through and what we put down we would make another lip and put it down, on top of a levee. We would stair-step them. You could see the amount of time and energy that would take to work that dirt up on top of the levee.

"Now I would like to talk just a little bit about these spuds and how they operated. Of course they were all done by electricity and all there was, was three little handles. And all you'd do is turn them on and turn them off and you'd raised them. Once they got in the raised position, you'd shut the handle off. So to run the dredge was something like this. You could sit in the seat and you were digging out in front of you. So you're putting the dirt on the levee. But you can only work in one certain area. Once that section is completed, then you're finished. So, what the operator would do then, is that the bucket would be up, you'd stand up and he'd go behind you,
because he switches from behind you in the operating station. The spud to the very rear, you’d raise that up. The spud to the left, you’d raise the left. Drop the spud, you’d move about 6 feet. That’s it. Drop the spuds, go back to digging, all day. For how ever long it took you to make the arc of dirt, and then you’d move it.

"The secret of the dredge was that it ran 24 hours. We had three operators. The crew on the dredge consisted of the captain, the cook, three operators. Of course the Captain was the boss and he kept us all in line. The cook, the most important person on board. We usually tried to hire a woman. We always tried to find the best cook.

"The cook’s responsibility, other than cooking the meals, was ordering food. Plan the menu, call in the order.

"My uncle Dick treated us like kings. We could have anything on board that we wanted, as far as food. Ice cream, anything. No alcohol on board. I guess that was rule number one.

"The captain’s responsibility was to bring the supplies on board. The diesel fuel, the water was all brought on board by a service barge, it’s also located up there tied alongside the dredge. The tug was hooked up to it. It was usually located in the Williamson River. They would bring out one of their trucks. It was a pontoon barge. They would fill the diesel compartments. We have a water tank on the farm, we’d fill the water tank, take it down to the service barge, hook it up, pump it full of water.

"On Fridays, the captain, in the morning, would take the tug and bring the service barge out alongside the dredge, would tie it up, and then we would start transferring the fuel on board, the water on board, and the supplies on board. We would take a plank aboard and we would lay it down from the dredge to the deck of the service barge. There was a difference in elevation of about three and a half feet. We would take 55 gallon oil drums and we would push them up this barge, up this plank. I pushed about 20 of these one time, not all in one day."
"I looked over at the captain one day, and I says, 'Captain', I says, 'how come we don't have a little hand crank here with an arm, that we could just lower over the side and we could lift these barrels on and we could just swing them over and put them on the deck?' Pretty hard to push a 55 gallon drum of motor oil off this plank. And he told me that Dick Henzel didn't like the way that would look on the side of his dredge. So, every time we took a 55 gallon drum of oil on board, we pushed it up the plank. There was nothing to be built alongside the edge of that dredge. So, we just brought on board, all the oil, everything."

(How much water storage was there?)

"5,000 gallons of water. It would be pumped on every week. On Saturdays, it was service day. We would operate till noon, eat lunch and then we would change oil. Every engine, got changed oil and we started from stem to stern and we greased everything that we could grease. It took all afternoon to do it."

(What happened to the oil on board?)

"It was put back in 55 gallon drums and I got to roll it back off. Rolled on, rolled off.

"Up on top of this gantry, which is 60 feet up in the air, up there on those two cables, there is a high cable and a low cable, clear out there is a set of pulleys, I don't know about 50, 60 feet out there. The first time I come on board, I helped the captain service. Let's go on out there and let's put a little grease in these pulleys.

"And I said, 'You got to be kidding me.' I'm not going to go out there.

"He says, 'Oh, come on', he says, 'you want to go up there with me.' Of course, no safety belts or anything like that. I was shaking. But, we did it.

"What was life like out there on the dredge? One sentence. Hot in the summer, cold in the winter. That's what it was like.

"To and from work the roads were bad, in the summer they were dusty and dirty, just typical farm roads, with more than
six inches of dust in the summer. In the wintertime it was worse. Made everything difficult. You were lucky if you could even drive to work. Chances are you would get stuck. Now that was just to get to the boat that was gonna take you to the dredge. We had three row boats, with outboard motors on them and the tug was never alongside the dredge. We went to and from the dredge in these little boats. You tried to get your pickup as far you could go and then from there you would take a little trip on this motor boat. There was only one ladder on the dredge and it's pretty skimpy and it's on the back, that's where you'd climb aboard. It wasn't much of a ladder because my uncle didn't like the way anything else would look.

"Now, one of the responsibilities of each of the crew, was that if somebody was expected on board, we always had to make sure that there was a boat on shore for somebody that was coming on board. In the winter time, these little boats don't go through very much ice. You can just pretty well bet that just a little skiff of ice on the lake and you were gonna be there. You couldn't get on and off.

"The dredge is noisy and it vibrates. Not a pleasant place to be when it's operating. The engines vibrate and there's a lot of movement. You can pretty well bet when you first come on board, the first three nights, you won't sleep. It dips, it rocks, it vibrates and it's noisy. It's either hot or it's cold.

"They served three meals. They served breakfast, lunch and dinner. As I mentioned, the food was good. You could pretty well bet you'd gain weight. Probably about five pounds a month. The first time I went on board, I didn't know what happened. Before I turned around I gained 17 pounds.

"There was a TV on board. The TV was located in the dining room. We had a table, six or eight chairs, TV was in one corner. You'd be watching a program, about that time the operator would change positions, he would make the move, you'd loose TV reception. It was gone.

"The operators would rotate shifts. The guy that worked
days, would go on swing shift and the guy that worked swing, would go graveyard. This kind of helped break up the monotony a little bit. We had a radio up in the operator's compartment that kind of helped break the monotony. I first got hooked on talk radio back in the early 70's. KGO San Francisco, Ira Blum. Do you remember Ira Blum? I spent many a night with Ira Blum.

"Life on the dredge was, I'm not going to use the word boring. I don't like that word. We had a job to do and we did it. We pretty much would come on board, we would stay there all week. The weekend, we got one shift off. If you worked Saturday, you had to be back to work Sunday night.

"My uncle, Dick, had a real love affair with this dredge. Everybody that worked on it was treated a little bit special. He took a lot of pride in it. It was more than just pride of ownership. He enjoyed being on board. He liked to bring people on board. I think every time that my Uncle Dick come on board, we could just see a smile in his face. Because he just enjoyed something that maybe was because he was part of it. But he honestly did have a special love affair of the dredge.

"The captain kept a log book. Just like a regular Navy ship. Everything the dredge did, every place it went, was written down in the log. It was the responsibility of the Captain to do this. You could go back two or three years. You could see where the dredge was at, what it was doing, what needed repaired. The cables were replaced, when they were replaced, the Captain wrote everything down.

"In the dining area where we would sit and have our meals, I'll never forget, was painted this ungodly maroon color. I mean it was depressing. It was dark and ugly. And one day, I was sitting there after dinner, I looked over at the Captain, his name was Clyde Ash.

"I said, 'Clyde', I says, 'My God', I says 'why do we have to sit here in this maroon colored room and become depressed? Said, 'Why don't we paint it white and put some pictures on the wall?'

"He says, 'Because this is your Uncle Dick's favorite
color.' So we had no pictures on the wall, and the room was painted maroon."

(Who footed the bill for all that operation?)

"It was paid out of operating expenses for the Tulana Farms. The company paid for the whole well being of the dredge.

"You could rent the dredge, back in the days when Tulana Farms still owned it. There's the old Tulana and the new Tulana. I'm part of the old Tulana. You could rent the dredge, if you wanted to. $46.00 an hour. Pretty cheap rent. Three operators, captain, cook, diesel fuel, $46.00 an hour. Today I rent a caterpillar tractor that costs me $40.00 an hour."

(How much were you paid?)

"We were probably paid about $3.25 an hour, maybe $3.00 an hour.

"The dredge was going to go out and reclaim ground. A major project. What transpired is the survey crew, in boats or hip waders, would physically go out into the marsh area and lay stakes to where the property line was at. Then the dredge would come in and start the reclamation project, building a dike.

"The dredge would be out for years. The only thing that would shut it down would be the winter conditions. The ice would become too thick. You couldn't manage it anymore. The next spring, the reclamation project would start. They would shut the dredge down during harvest time, when these guys would be needed in the fields. But after the harvest was over the dredge would go back to work.

THE END

PROLOGUE

On September 28, 1997, the Historical Society visited the dredge at the invitation of Robert and Tamera Campbell, the present owners. We were taken on a tour by Mrs. Campbell. She and her husband are in the process of restoring the dredge.
The following are contributions made to the Endowment Fund since the last issue of the Trumpeter. These contributions benefit the Museum and are thoughtful and fitting tributes to those special friends and family who are remembered and honored.

IN MEMORY OF ...  

AL ANGEL

Leona Angel
Paul & Billie Fitzhugh
Mae Smith
Madge Walker

ROSHOND 'ROSE' BRANNAN

Mae Smith

PAUL DELLER

Mae Smith
Madge Walker

FRANK EBERLEIN

Paul & Billie Fitzhugh
Richard & Beverly Moulton

ETHEL GOELLER

Mr. & Mrs. Bruce Kielsmeier
Jean M. Macbeth
Mr. & Mrs. Richard Rambo

ROMONA MCBRIDE

Mae Smith

BOBBIE MUSSLEMAN

Mr. & Mrs. Bruce Smith & family
Father Time has done it again! 1998. Only a breath away from a new millennium. The changing of the calendar always brings on a reflective mood when we look back to review what has been done as well as looking forward to future projects to be accomplished.

The Museum Board has been very active this year as they have worked toward fund raising for the Endowment Fund. Each one has been supportive and made a huge effort to attend meetings, meet with the budget committee, Commissioners, and explain to local citizens what the business of the museum is. Thank you to each one. The newly elected chair is Steve Gelhart; vice chair, John Fields, and secretary, Pearl Nason.

The Research Library continues to be the key to a strong museum. Staff assistance covered a wide array of topics from water rights, Pelican Bay, the History of Medicine, environmental assessments for the Running Y, and one that had a particularly colorful name, Wild Gal Springs. Anyone heard of it? Before the Courthouse could be razed, it had to be fully documented historically. A large portion of the research was done in the archives. We all feel very satisfied to know that our work in the museum is important to many aspects of our community.

Charging admission to non-residents was a big hurdle. One that is paying off in providing additional money to cover costs of operation. The Gift Shop, too, is a success story that we attempt to upgrade constantly. Keep it in mind when you need a quick thank you, post card, greeting card or book. Especially nice are the Victorian reproductions Carol Mattos has stocked. Princess Di paper dolls will be collectibles and are currently available.

One last pitch. The Museum Endowment account which is totally separate from the County and administered by a private citizen board of directors, is beginning to grow more rapidly. At the present time, deposits range in the $160,000 area. When it reaches $200,000, interest generated can be requested for museum projects. If the Museum Endowment is named in a Will as the recipient in an estate as the Ross Ragland was, or as a choice for donations in an obituary, or for happy occasions...births, anniversaries, and birthdays, the fund will help to stabilize the museum.

Many thanks to all of you for your support. Your contributions to the Endowment in December in my name always overwhelms me as the amount this year was a staggering $528 to the Endowment. Thank you for your generosity!!

Pat McMillan, Museum Director
FRIENDS OF THE KLAMATH COUNTY MUSEUM

Statement of Income and Disbursement
January 1, 1997 to December 31, 1997

Savings Account:
Beginning balance $ 2,346.91
Interest Jan.- Nov. ______ 47.68
Balance on November 30, 1997 $ 2,394.59
Transfer to Checking Account (2,394.59) on December 1, 1997 ______
Ending Balance on December 31, 1997 ___________________________ 0

Checking Account:
Beginning balance 1,344.22

Income:
Dues 1,013.00
Baldwin weddings 320.00
Baldwin wedding photos 3.50
A. & C. Sales 1,965.58
Ice cream at Ethnic Fair 85.00
Bulk mail permit (Hist. Soc.) 42.50
Waldenbooks 1996 Book Fair 347.21
Rummage Sale 431.71
Gift Shop 3,000.00
Transfer from Savings Account 2,394.59

Expenses:
State of Oregon (10.00)
Postage (36.00)
Bulk mailing permit (85.00)
Baldwin wedding expenses (17.00)
Ice cream (Umpqua Dairy) (32.68)
Museum supplies (100.00)
Gift certificate - Orendorff (25.00)
Bulk mailing (20.11)
Dissolution fee (10.00)
Balance on December 22, 1997 10,611.52

Transfer to Klamath County Museum Foundation on December 23, 1997 (10,611.52)

Final Balance on December 31, 1997 ___________________________ 0
Editor's Page
Friends of the Museum & Klamath County Historical Society

As of the end of 1997, the Friends of the Klamath County Museum have merged into the Klamath County Historical Society.

The Friends were in existence for many years. The first officers were Carol Mattos, President; Madge Walker, Secretary; and Dorothy Kerns, Treasurer. These people and several others down through the years helped to keep the museums open by donating their time, money and expertise whenever needed.

As you can see by the attached Financial Statement, the Friends were able to contribute a final amount of over $10,000.00 to the Endowment.

Now with the Historical Society taking on this responsibility, committees need to be formed as soon as possible. We need people to organize the following events: The Museum Dinner, the Rummage Sale, the Antiques and Collectibles Sale(s), the Homes Tour, the Book Fair and any other ideas people may have.

Preferably a different person will head a committee for each event. That way we can spread the work around.

Please contact Wayne Scott, at 884-2899 or Susan Rambo at 882-8853 if you are interested in helping. REMEMBER, IF YOU DON'T DO IT, WHO WILL?

FOR SALE!! The museum has several copies of the 1920 publication With the Colors. This is the original hard-cover book with names and photographs of military personnel from Klamath County who served in World War I. A bargain at $10.00 each. You can call 883-4208 or see them at 1451 Main Street, Klamath Falls, OR.

About your Editor:

I'm sure not everyone knows who I am, or anything about me. Well, I'll tell you a few things. I was born here in Klamath Falls and have lived here most all my life. I went to Pelican Elementary School, Fremont Jr. High, Mazama Mid-High and Klamath Union HS. I attended OIT, acquired a degree from LCC and a degree from SOSC. I have been married to Richard for 22 years. I have one son, Jim and a step-son, Brian. We live in Keno, have a dog and a cat, two llamas and numerous fish. I enjoy bird-watching and history. Susan Rambo.