## Officers

**President**
Don Hammer
541-924-0620
hammerd@evanite.com

**Vice President**
Louie Frick
541-327-1210
mining@teleport.com

**Secretary**
Ken Haines
541-926-8776
kenh@peak.org

**Treasurer**
Andy Miller
503-585-8013
andyfammiller@hotmail.com

**Government Affairs**
Tom Quintal
503-371-9747
tjdq@open.org

**Committees**

**Claims**
Larry Coon
Joe Garcia
Don Hammer
Wes Jeffers
Gary Wolf
Diane & Don Smith
Will Winslow

**Events & Outings**

Mary Atkinson
Fred & Cindy Fellabaum
Joe & Shirley Garcia
Don Hammer
Wes Jeffers
Janie Miller
Diane Smith
Gary Wolf
Cliff Winston

**Programs**

Diane Smith
Wes Jeffers

**Website**

Don Hammer
Cliff Winston
Paul Messersmith

**Newsletter Editor**

Gaylyn Cross
gcross004@web-ster.com

# WILLAMETTE VALLEY MINERS

**November 2006**

## President's Report

Well the year is winding down and elections are due this month. It looks like we have the President, Vice President, and Public Affairs covered, but we are still looking for people who are willing to take on the tasks of Secretary and Treasurer. We also need to re-evaluate the committees list and look for new committed members. A list of all committees can be found on the newsletter. If you are interested in being a member on a committee please contact one of the clubs officers.

Don Hammer
President WVM

## Outings/Events

Club Meeting 7 PM November 16

Christmas Partly & Club Meeting December 9

**Newsletter**

Anything want added to the newsletter let me know Email gcross004@web-ster.com

***If you have changed your email/phone number or address please let us know by sending a note to the club mail box.***

**Meeting Minutes**
**Oct 19, 2006**
Ken Haines, Secretary

Club President, Don Hammer, brought the October meeting of the Willamette Valley Miners to order promptly at 7:00 pm.
The regularly scheduled monthly meetings fall on the third Thursday of the month. Meeting in the Marion County Fire Station, at 300 Cordon Road NE, in Salem, OR. Our group uses the downstairs large meeting room in the rear of the station, at the south end of the meeting rooms. Meetings are scheduled to begin at 7:00 pm.
Attending the October gathering were 37 club members and 1 guest.
Meeting minutes for the previous meeting in September were accepted by the group, as written in the newsletter.
Treasurer, Andy Miller gave the monthly treasurers report which was also accepted by the members.
The Events and Outings committee met early in October and tentatively scheduled many of the club outings for 2007. Coming events planned include:
A January visit to the renowned Rice museum, famous for its world class mineral specimens.
February metal detecting outing in Salem.
March WVM-1 Quartzville claim, annual spruce-up.
April opens with the annual Gold Prospectors of America Association (GPAA) Gold Show is Salem.
End of April is planned for the Beverly Beach outing, featuring beach sluicing for gold.
May is our informative Miners Work Shop, learn the fundamentals of the elements of prospecting and mining.
End of May is prospecting time at our Vincent Creek claim on the east side.
June features a prospecting trip to our claim at Shady Cove on the Little North Fork and Miners Rendezvous.
July is more gold prospecting at our Claims on Dad's Creek and a trip to Sharps Creek.
August is an outing at Myrtle Creek, and Clackamas County Fair panning booth.
September we are at Miner's Meadow and Beverly Beach.
October, November and December also will have club sponsored outings and events.
The full list including dates, and other outings and events, will be available soon.
Paul Messersmith gave a brief report on the issue of the clubs Dad's Creek Claims. At the center of the report was the seemingly unjust suit filed by the previous claim holders, the Buchholz brothers, against the club. It seems that after they allegedly allowed the claims to lapse into default, our club filed on the claims. Now they have filed suit claiming that our club took their claims, when in fact, BLM records show that they didn't pay their annual claim fees and renew the claims, before the deadlines. A group of Willamette Valley Miners met to study the issue and provide the club with options. Paul Messersmith emerged as spokesman for the group. Paul contacted attorney James Buchal as agreed upon by the group and an extension has been granted by the court regarding the matter. The membership approved another larger amount from our treasury for defending our claims and possibly a counter suit. Paul was also approved by the membership to work with Attorney James Buchal, in the defense of the club and our claims.
In other news, member Gary Ashley reported that Daniel Ross Nonnemaker, who was jailed on accusations of theft and racketeering stemming from his Quartzville timber and mining scam, still resides in the Linn County Jail as his attorney tries to make a deal.
Tom Quintal reported on government affairs relating to our mining rights. It seems that now a move is under way to attempt to tax equipment and personal property associated with federal mining claims. Tom said that details are available by contacting Judy James at the Dept. of Revenue in Salem. Her Phone number is 503 945 8026. Get involved, write your congressman.
Don Hammer reported that the web page will be run through Peak Internet, a Corvallis firm specializing in web hosting and internet access. The membership agreed on the $9.95 per month needed to make it happen.
The November Willamette Valley Miners Meeting will bring the annual elections for club officers and elected positions. To date, these are the members who have said they would be willing to serve:
Louie Frick is willing to accept as President for 2007.
Steve Landis is willing to accept as Vice President for 2007.
Marshal Phares is willing to accept as Treasurer for 2007.
Secretary position is still open.
Paul Messersmith is willing to accept as Government Affairs for 2007.
Please attend our November meeting on Thursday the 16th and help us elect our 2007 officers.
Wes Jeffers held the evening raffles and the meeting was adjourned.
Happy
Prospecting

## 2007 New Member/Renewal Dues

A reminder to all members, as voted the dues for 2007 will be $20.00. I have new membership applications ran off with the new amount. Anyone holding old membership applications please discard or change the amount.

## Change to Club Constitution

As proposed, at the September meeting a vote to change the club constitution Article III Section II. Special Meetings: Legal business, urgent matters require 7 members, consisting of at least 2 officers and 5 members.

*The change proposed, to read*: Legal business, urgent matters require 10 percent of club membership consisting of at least 2 officers. Officer calling the meeting has to contact as many officers and members needed for the meeting. This has ran for two months in writing in the new letter minutes.

## Government Affairs

This is an editorial that recently appeared in the Albany Democrat Herald newspaper.

## MORE TROOPERS – FEWER BUREAUCRATES

On a recent trip from Albany to Northern California I did not observe an Oregon State Police Trooper until just south of Ashland where one had a tractor trailer pulled over. Once over Siskiyou summit and into Northern California, I counted five (5) CA. state troopers and three county sheriff cruisers within a 25 mile stretch of highway! While driving in Oregon, there were at least six (6) vehicles that were traveling well over 80 MPH with two of them probably near 100 MPH.

With I-5 being the main corridor for drug trafficking from Mexico into the Northwest and other parts of the nation, here in Oregon we have a governor who has continually refused to hire more state police to ensure a greater level of public safety. He is more interested in increasing the already bloated bureaucratic departments like DEQ and ODFW, departments that are more interested in threatening and harassing small scale gold miners for stirring up a little mud or financing a multi-million dollar "research facility" on Fall Creek to study how salmon and steelhead navigate around logs in a stream!

It's obvious that Governor K. is far more interested in filling his 'war chest' with contributions from environmental extremist groups and enlarging the above mentioned bloated bureaucracies with employees who are sympathetic supporters of his far left political and environmental philosophy. I think we've had enough of that!

Mr. Saxton is only partially correct when he says this Governor is a "do nothing" Governor – it depends on which newly hired bureaucrat you talk to!

I hope we all see the need for the citizens of Oregon to take back control of our government and diminish the impact of special interest groups.

Paul Messersmith
1007 37th Avenue SW
Albany, OR 97321
926-8153
messersp@comcast.net

## WHAT'S IN YOUR BAG?

Paul M. will unload his "grub bag" and discuss the contents for the benefit of folks new to gold prospecting. He'll also discuss some aspects of working out-of-water fractured bedrock and demonstrate some of the equipment he uses to gather the material from the cracks and crevasses. A question and answer session will follow.

## Cliff's Corner

POWERING YOUR DETECTOR:
The Truth About Batteries*

### Cliff's Metal Detectors

With the cost of batteries on the rise, constant replacement of a detector's batteries with fresh ones can become expensive. Just how important are new batteries? Do new batteries help in obtaining greater depth? How often should we change them? Are alkaline a better investment than standard type? Are ni-cads a better choice? Is using one size of battery better than another? What are the real differences between batteries? Do more batteries make an instrument more powerful?

These are some of the questions that plague many of the treasure hunters concerning the energy sources of our metal detectors. Hopefully, by the time this two part article is over, many of the above questions haunting serious treasure hunters will be answered.

Some of the answers to the above questions are not that simple. Battery technology is constantly changing - making comparisons difficult. Also, modem metal detector technology is constantly being improved with the development of new and better electronic components requiring less energy. Together, these two realms of improvements make comparisons very difficult. So, before we start evaluating the differences and benefits of the different power sources, we must remember that there are no general answers that span each and every detector.

DO NEW BATTERIES MAKE A DETECTOR MORE POWERFUL?

Over the years, articles have been written that implied a fresh set of batteries will increase the power capabilities, thus enhance the depth capabilities of a detector. Is this true? Strange as it may seem, the general answer is no.

But, in the most liberal sense, there may be some very slight credibility to this statement. Changing batteries can, and quite often seems to give, an increase in sensitivity. However, this increase is not the result of a more powerful

signal transmitted by the search coil, but the result of small changes in the detector's audio circuitry making the signal appear louder.

In most of the newer motion detectors, the audio portion of a detector is one of the few sections of a metal detector's electronic circuitry directly affected by differences in voltage between new batteries and partially exhausted ones. The circuits that supply the transmitted signal to the search coil and other critical analyzing circuits obtain their power from the battery only after this voltage has been processed.

For a metal detector to be extremely sensitive to small signal changes, the energy supplied by the power source is critical. It has to have the ability of maintaining a constant voltage output at all times. Batteries by themselves cannot do this and, some batteries are worse than others in this respect.

To assure a quality voltage source to the electronic components, manufacturers use various types of special electronic circuitry including some called voltage regulators. A voltage regulator has the ability to regulate or hold its output at a constant level under the most severe conditions. Normally, a regulator will keep its output voltage constant as long as the battery voltage is greater than the regulator output.

Batteries begin to deteriorate the minute they are put into use. As they weaken, their voltage output drops, and at some point this voltage is insufficient to meet the requirements needed by the regulating circuitry. It is at this point that the battery voltage becomes critical and has an effect on the detector's operations.

Until this minimum battery voltage is reached, most of the electronic circuitry within the detector does not even see the difference in the battery output. In other words, in most cases, changing batteries prematurely really has insignificant advantages as far as depth is concerned.

WHAT ABOUT THE NUMBER OF BATTERIES USED?

Are the number or type of batteries used by a metal detector an indication of the voltage, power, or depth capabilities of an instrument? The answer to this question is also no. A metal detector's sensitivity or depth capabilities should not be evaluated upon the number or types of batteries used. The depth capabilities are the result of carefully engineering all aspects of a detector, including the coil.

Also, the number and type of batteries do not necessarily reflect what the real voltage is being used by the circuitry. Due to modem technology, it is possible to use the power from batteries and generate higher and/or different voltages. Therefore, the number or types of batteries do not reflect the actual voltage used by the majority of the electronic circuitry of a metal detector.

As a general rule, the selection of various batteries by the manufacturers is done to meet certain requirements concerning weight, space, and/or overall power needs of the electronic circuitry. The selection has nothing to do with the depth capabilities of the instrument. In some cases, the size and type of batteries used are due to the evolution of that particular model.

The misconception that new batteries increase the depth capabilities has lead to people thinking that increasing the number or types of batteries can further increase the depth of their detector. Such experimentation can lead to disaster. Even if tampering with the type or number of batteries used in a detector doesn't display any negative effects, any increases in depth capabilities would be insignificant.

COMMON BATTERIES USED

The three most common sizes of batteries used by metal detectors today are the 9 volt transistor, 1- 1/2 volt AA, and the 1- 1/2 volt C cell. Each of these batteries have their advantages and disadvantages.

The different size 1-1/2 volt batteries (AAA, AA, C cell and D cell) all produce the same voltage - 1- 1/2 volts. They differ in their current capabilities or, to a metal detector operator, the operating time. Obviously, the larger batteries will operate longer before running down.

In other words, manufacturers that have elected to use "C" cell batteries have done so because of the increased operating time over smaller 1-1/2 volt batteries such as AA or AAA types. The disadvantage of the larger batteries is the increased weight and the necessary room for housing.

Can a person add up the number of batteries in a metal detector and determine the voltage used? The answer is no. It's true that in most cases, using the little AA size batteries, the number can be added. But there are other metal detector designs where the batteries are in parallel. For example, some detectors use two 9 volt transistor batteries that are connected together so that the output voltage is still 9 volts. This paralleling of the batteries is done to provide extra current for a longer operating time rather than for more voltage. Connecting batteries in series [end to end] increases the output voltage, while paralleling them [connecting the batteries' positive terminals together and negative terminals together can increase the available current.

The detector's battery situation can be confusing because of the different possibilities of use. For example, some detectors use a separate battery to power the audio portion of the circuitry. Because the audio portion of the detector can drain batteries the fastest, it is possible to replace the particular audio battery only and reduce overall battery expenses. A more common and recommended approach is to rotate the batteries periodically to assure even discharge. The best place to find such information is in a detector's manual.

In emergency situations, can battery types be substituted? For example, can a 9 volt transistor battery be substituted for a six pack of AA's (which is also equal to 9 volts). In most cases the answer is yes, but operating time will be limited. In a few cases, a 9 volt battery may not have the necessary current capability to operate satisfactorily for any sufficient time. Again, a person should check the particular detector's owner's manual.

What about substituting a 9 volt transistor battery for other size AA packs such as a four pack or an 8 pack? The general answer is DON'T Remember to never change voltages. Using two 9 volt transistor batteries to replace two 4 packs of AA's could change the applied voltage from the original 12 volts (the voltage of the two 4 packs) to 18 volts (the voltage of the two 8 volt batteries).

One point to remember about the different battery packs such as the 4 or 8 pack of AA's is - all these batteries are connected in series. If any one of them fail, the effectiveness of the total pack is greatly diminished. In other words, this pack is as strong as its weakest link.

Generally, if all the batteries were changed at one time and one fails some time later, the possibilities are great that the rest are marginal and probably should be replaced also.

An exception to the general replacement of all batteries when one fails is in the case of ni-cads. Due to their ability to be recharged, these batteries can last for years. Unfortunately, some fail earlier than others. In such cases, the defective one can be replaced by itself.

CONCLUSION

The use of different sizes and types of batteries by the different manufacturers can seem perplexing and confusing to a serious treasure hunter. Just remember the depth capabilities of an instrument has no correlation to the number, size, or type of batteries used. Also, remember that by increasing the num

Any slight increase in sensitivity that appears to occur as a result of changing batteries is usually due to a very slight increase in efficiency of the audio portion of the detector and not the transmitted power. On motion detectors having a silent search feature, these increases will normally show up in the all metal mode only.

The bottom line is, many batteries are replaced unnecessarily or prematurely. In my years of testing, I have found little advantage in changing batteries early. I have not experienced any significant difference in depth capabilities as batteries age, especially when using the discrimination mode.

A wise treasure hunter will carry spare batteries when out treasure hunting. Even new batteries fail prematurely, so by having a spare set on hand, a treasure hunter can change them when they fail rather than arbitrarily changing them because they "might be bad."

*From: *Treasure Facts* magazine

# Willamette Valley Miners

PO Box 13044
Salem OR 97309-1044

**We Meet at 7:00 pm at**
**Marion County Fire Hall**
**300 Cordon Rd NE**
**Salem OR**