

The ATLATL

JULY 1993

"Too long have I hunted mammoth alone!"
Rich McWhorter

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THE NEWSLETTER OF THE WORLD ATLATL ASSOCIATION, INC.
1390 SOUTH PARIS COURT, AURORA, COLORADO 80012, USA
Editor: Bill Tate

NOTE: ADDRESS ALL BUSINESS TO NEW WAA SECRETARY, LENI CLUBB, P.O. BOX 56, OCOTILLO, CA 92259, U S A. CONTINUE SENDING MATERIALS FOR THIS NEWSLETTER TO: BILL TATE, 1390 SOUTH PARIS COURT, AURORA, CO 80012.

SAFETY FIRST--SAYS NEW WAA BOARD

In light of recent incidents involving atlatls and darts, The World Atlatl Association Board of Directors has appointed two members to establish guidelines for keeping the sport of atlatling safe. Marcia Tate and Hallie Cash are devising a set of atlatl safety rules to be followed at all WAA sanctioned contests and programs. WAA members felt this action was necessary after observing careless and unsupervised handling of the weapon by children at a recent atlatl contest in which a child was struck by an atlatl dart, luckily without injury, and an episode which took place in Montana June 12th, 1993. The following is a account of that incident as reported by the Denver Post, June 15, and 17, 1993.

BOY SURVIVES TREK WITH ARROW IN HEAD By Jim Kirksey

Robin Steward has come a long way since he brushed death along the Little Bighorn River in Montana last Saturday evening.

The 9-year-old Crow Indian boy made a 600 mile odyssey with the sharp point of an arrow imbedded in his brain. The first 40 miles were made with the 5-foot-long arrow protruding from his skull and sticking out the window of his family's

Suzuki on the way to Sheridan, Wyo. During that phase of the journey, Robin's head was held in his grandfather's lap.

Later, after three hours of delicate surgery by physicians from the Colorado Neurological Institute at Swedish Medical Center in Englewood, Robin's prospects for recovery improved immensely. He's doing so well that he's likely to be home in time to celebrate his 10th birthday later this month in Lodge Grass, Mont.

"It could have been a fatal injury. He could have suffered devastating neurological damage," said Dr. Cynthia Norrgren, one of the surgeons. It appears his only lasting injury may be partial loss of sight.



John Prieto

"We want to acknowledge that this is a miracle by God," said the boy's father, Marvin Steward.

The Crow youngster was injured about 8 p.m. Saturday at an arrow-throwing tournament at Wyola, Mont. Crow arrows are typically 12 to 15

"hands" long--that's 4 to 5 feet--and they are thrown rather than propelled from a bow.

Robin was playing with other children outside the makeshift arena, where the competitors made their warmup tosses, Stewart said. Robin was apparently kneeling, perhaps tying his shoe, near the target when he was struck by a wayward arrow.

Rejecting advice to pull the arrow out of his son's head, Stewart and other family members put the boy in the small car by sticking the arrow out a window and adjusting the window glass so the weapon rested against it.

They drove to a Sheridan hospital where bolt cutters were used to snap the wood shaft off the arrow. Robin was then transferred by air, first to Billings, Mont., then to Swedish in Englewood.



John Prieto

X-RAY OF ROBIN'S SKULL.

The arrow point pierced the right side of Robin's skull in the right frontal area. It passed above the right carotid artery and below the left carotid artery--the two major blood vessels in the head.

The arrow lodged in the orbit on the left side of the skull, partially severing the optic nerve to his left eye.

The surgery was performed when he arrived at Swedish, about 8 a.m. Sunday. Dr. Gary VanderArk and Norrgren exposed the left side of the boy's brain and VanderArk watched closely as Norrgren slowly pulled out the arrow point.

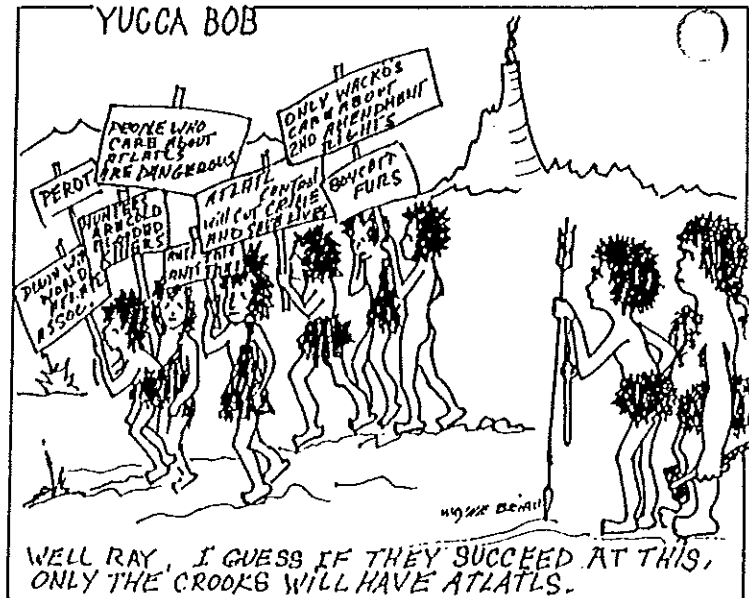
"I think he'll be fine," VanderArk said.

"I think his recovery will be fairly rapid."

Behind every successful man is an amazed mother-in-law.

SPECIAL MEETING OF THE WAA DIRECTORS, JUNE 5, 1993.

A special meeting of the Executive Board was held at Fremont Indian State Park in Utah, following the very successful atlatl contest held earlier that day. Primary in the discussion was the request by Fremont Indian State Park Superintendent, Gordon Topham to hold another competition next year. The Executive Board agreed and set the date of June 11, 1994 for the event. Additional subjects were covered, including range safety, procurement of a bull horn to assist in control at these events and the purchase of a number of extra atlatls and darts for use by visitors to our contests.



THIS AN' THAT
by Wayne Brian

Greetings from Arizona. The temperature is about 112 degrees even as I write. I have been throwing some, however, I throw at 5:00 a.m.

BANNERSTONES
TWO CENTS MORE
by Kermit L. Wilkison

Ed. note: This article was previously published in the Central States Archaeological Journal, Vol. 39, April 1992, No. 2.

The article "Bannerstone Versus Atlatl Weight" in the Central States Archaeological Journal, Vol. 38, No. 4, October 1991, by Larry B. Scheiber, was of great interest to me. His, at least 3,000 atlatl throws, far exceeds mine of some 300 or so. Probably no more than six of my throws on any one outing utilized the same hardware. Differences in hardware include not only changes of length and material for the atlatl and spear, but changes in other dimensions, i.e., weights, points, and fletching. In addition to trying what appears to be the traditional ball and socket arrangement with the ball or barb on the atlatl and the socket on the aft end of the spear, I have tried reversing this arrangement, as well as using modern plastic archery nocks on the spear with a short string substitute on the atlatl. My experiments leave a lot to be desired in terms of accuracy and range, but some improvement has occurred.

None of the points or bannerstones I have used were prehistoric lithic originals. Like Larry points out, such things are much too valuable to toss into the wind. Some of the points and weights were of lithic material shaped by nature, simulating what prehistoric people may have used. Long slender stones with one side flat or slightly concave work great as weights for the

atlatl or dart. Their main disadvantage is that they are difficult to trim to change their weight by small increments. Tying them into place using rawhide, sinew, or other natural fibers works, but took far too much time while experimenting. I take advantage of modern technology; my experimental weights are lead, steel, or copper, which has been patterned into tubular, winged, flat, or whatever shape, and are held in place with tape or rubber bands. They can be placed anywhere along the spear shaft or atlatl quickly. Just remember, if you are using flat weights in an area where they might violate the space between the atlatl and spear, place them on the back side of the atlatl, or rotate the spear to eliminate the interference. My current favorite weight for the spear is about 8 to 12 inches of solid copper wire of 12 or 14 gauge, wound in a tight coil like a spring. If wound on a small mandrel, then forced onto the shaft, this "spring" will usually hold in place without being tied or taped.

My fletching (feathers) experience includes both tying and glueing on of various materials, such as feathers, plastic, thin wood, and thin rawhide vanes. The number of vanes includes 1, 2, 3, and 4 per shaft. If only 1 or 2 are used, it seems that they need to be placed in a spiral to cause the spear to spin in flight. All seem to work. Some are just more durable than others. One fletching material that surprises a lot of people is a natural growing light-weight hollow stick about a foot long--a piece of

That is the nicest time of day out here--or down here in Arizona.

Not much activity; however, I gave a demonstration at Pueblo Grande Museum in Phoenix on the 24th of April. There was more interest than anticipated, probably 40 to 50 people gave it (the atlatl) a try. A good time was had by all. I was helped by two other WAA members, Ray Ferguson of Fremont Indian State Park fame, and Albert Abril.



Wayne, Ray, and Albert at Pueblo Grande.

Talks on a contest to be held at Pueblo Grande bogged down on the subject of insurance, but I haven't completely given up.

Later in April I gave a demonstration at Homoloui State park in Winslow Arizona for the grand opening ceremony. There were lots of Indian kids.....



Lots of Girl Scouts.....



lots of adults, and lots of sun, sand, and lizards.

It was a very long strenuous day -- I probably taught 100 or more kids how to throw with the atlatl. I also tried to set a new world record for long distance, but only managed 625 feet.



Afterwards I left Winslow for the White Mountains and three days of glorious trout fishing on those beautiful lakes in the pines.

Peace!

Wayne Brian

If it ain't broke...
break it.

conducted with my nephew, Jason Limbaugh of Clarksville, Tennessee, and me doing the throwing. Jason holds aircraft commercial pilot ratings. You can imagine our skepticism when Jerry wanted us to try weights aft of the fletching, using the weight as the socket. Much to our surprise, my first throw of such an arrangement gave equal or better performance to anything I had tried before. When I retrieved that spear, I checked its balance point and found that the added weight had shifted its center of gravity aft about 10 percent which placed it just about half an inch aft of the spears center of length.

The Fall 1991, Vol. 4, No. 3 issue of THE ATLATL, a newsletter of The World Atlatl Association, Inc., (WAA), 1390 South Paris Court, Aurora, Colorado 80012, has some statistics on percentage of weight (balance point) for each of 10 atlatl "darts" that Charley Lilly compiled. Mr. Lilly is the WAA Secretary and checked darts being used in the 1991 Colorado Archaeological Society's Annual Encampment's atlatl contest. The proximal and distal percentage weight distributions and overall lengths of the darts made or used by different atlatlers were as follows:

PROXIMAL weight %	DISTAL weight %	OAL inches
47.5	52.5	72.5
45.0	55.0	51.0
40.0	60.0	68.0
52.0	48.0	61.0
45.0	55.0	74.0
44.0	56.0	72.4
46.0	54.0	63.5

48.0	52.0	55.25
46.0	54.0	55.25
45.0	55.0	69.8

As time permits, I want to use modern materials to sort out the variables on what makes atlatl/spear combinations work well, then duplicate these characteristics using materials and techniques that could have been available to the original inventors. Even if outwardly successful in this effort, there is a high probability that I will not have the practical knowledge or "feel" for what makes them work as prehistoric people had. One difference that will be obvious in any case, is that any replicas that I make will be permanently marked as such -- even if I have to make lithic bannerstones to use as atlatl weights.

NEW OFFICERS ELECTED AT WAA ANNUAL MEETING

WAA President BONEY COSYLEON
 Vice President TIM BOUCHER
 Secretary LENI CLUBB
 Treasurer HEIDE DAETWYLER

Board of Directors:
 J. KEITH ABERNATHY
 LOUIS BECKER
 WAYNE BRIAN
 KEN GRAMSTAD
 CHRIS JUDSON
 SCOTT LESLIE
 CHARLEY LILLY
 BILL TATE

Other business at the meeting included the appointment of Safety Officials, HALLIE CASH and MARCIA TATE for the reasons stated on the front

cane. Turn the large end of the cane forward, placing it over the spear shaft and use the small end cut near a joint as the socket.

In 1950, I started a hobby shop dealing mostly in model airplanes. In 1958, I completed college with an engineering degree, and have worked for the last 33 years as an engineer for a large aerospace company. When it comes to stability of airplanes, darts, arrows, spears, or what have you, in the Earth's atmosphere, engineers can blandly tell you that the center of gravity must be forward of the center of pressure. Another way of saying the same thing about a spear or dart, is that the balance point must be ahead of the portion with the greatest surface area (fins, wings, fletching, etc.). Modern technology has enabled us to sidetrack the basic laws of science by using thrust vectoring to overcome the need for fins to stabilize and guide rockets. Fins are useless in space, for guidance anyway, as there is no atmosphere for developing pressure for stability or guidance. Nonetheless, engineers and scientists know that the most efficient thrust vector steering, that is getting the most turning effort with the least thrust, occurs when the thrust is as far away from the center of gravity and as near perpendicular to the primary direction of travel as possible. Prehistoric people probably could not explain all of this in words as well as we think we can. However, they seemed to have understood the practical aspects of what made the atlatl/spear combination

work even to the extent of using weight for adjusting stability, energy transfer, and spring characteristics of the system. That represents more practical knowledge than many of us seem to have today.

In his article "Atlatl Weights," (CSAJ Vol. 38, No. 2, Apr. 1991), Jerry Bost of Kennett, Missouri, pointed out that prehistoric people may have used atlatl weights or bannerstones for several things. One use was as a prestige symbol, such as Larry Scheiber's totem bannerstone. It could be that early people used the best atlatl weights as bannerstones and "cheaper" ones for the dirty work. A matter of economics--getting the most of what they needed, with the least expenditure of what they had. After just writing that last sentence, I cannot help but wonder if they had a word or phrase for "economics." At the same time, they may have had a better understanding of the practical aspects of economics. They lived close to, and with what they had.

Jerry Bost, a high school classmate of mine and one of my best life-long friends was also one of my hobby shop customers. Believe me, he has tried some unusual things including model aircraft designs that you would not believe. He gave me a draft copy of his article on atlatl weights prior to sending it to the CSAJ. A bout with arthritis some years back severely limited Jerry's ability to throw anything, including atlatl spears. It did not limit him from thinking about or wanting to try different things. Some of his atlatl weight experiments were

a bow." We had over 400 people sign our petition, and hope to hunt with atlatls this fall for the first time in a thousand years. Letters from WAA members would be greatly appreciated. Please address them to the Missouri Department of

Conservation, P. O. Box 180, Jefferson City, MO 65102.

Planning of events for later this year is already underway. Interested persons should write: Bill Jacobsen, Route 2, Box 47, Edwards, MO 65326, phone (417) 993-6384.

LETTERS AND STUFF

I have been experimenting with different lengths of atlatls for hunting purposes and have found that the shorter they are, the more accurate they are at the shorter distances one would generally use for deer hunting. I think this is because with the longer atlatl, the arrow has to come down sharply at a close target and invariably I overthrow the target with the longer atlatl. The longer atlatls of course, are much better for distance throwing. I am trying atlatls from 12 to



40 inches. in two inch steps, to see how t distance adds or drops off as they get longer. Currently a 3. to 32 inch atlatl is getting the maximum distance. I am also experimenting with different woods, especially osage orange and ash, to see if the flex of the wood on release adds to distance or accuracy. I will send the results to WAA later this summer.

Bill Jacobsen

Dear Bill,
I participated in the Colorado Archaeological Society's Atlatl contest last July. I am in the process of organizing a contest in Louisiana. We do not have final approval from the state, but the indications are all good. The present plan is to have the contest in October at the Marksville State Commemorative Area in Marksville, LA. Please list my name and address as this is tentative. I'll keep you informed of our progress.

Lloyd Pine, 5858 Berkshire, Baton Rouge, LA
70806 phone (504) 926-5785

MONTANA MAMMOTH HUNT SET FOR SEPTEMBER
This annual event is scheduled for 1:00 p.m. Saturday, Sep. 4, 1993 at the home of Dave and Diana Schwab, 6165 Turk Road near Helena, MT
(From Helena, take Bird's Eye Road north approximately 12 miles, making a left onto Three Mile Road for approximately 2 miles, then right fork onto Turk Road. Dave's is the first house on the right. If you have difficulty, call: (406) 449-4601.

Paul Leininger

page of this issue.

A Certificate of Achievement, a one year membership, and a WAA T-Shirt are to be presented to 12-year old Andy Hayes of St. Louis, MO for his prize winning science project on atlatls. (CONGRATULATIONS ANDY!)

Members present voted to hold both a Nevada and Utah event in 1994.

Family memberships may now be obtained at the same price of \$10.00, however only one copy of the newsletter will be sent to the family address.

FIRST ANNUAL MISSOURI ATLATL CONTEST

By Bill Jacobsen

On May 1, 1993, the First Annual Missouri Atlatl Contest was held at the Pomme De Terre Rendezvous, near Hermitage, Missouri.

It consisted of two rounds of throws, each at a full size whitetail deer on a 5 X 6 foot target. Distances were 15, 25, and 35 yards. A hit in the kill zone scored 5 points, elsewhere on the deer, 3 points, and a target hit was 2 points.

1st place JOHN SIEBERT
2nd place DAVE TICKEMYER
3rd place KRISTA MEWES
4th place MIKE MEWES
5th place BILL JACOBSEN

John Siebert, Dave Tickemyer, and Bill Jacobsen, all WAA members, gave lessons and demonstrations with various styles of atlatls. Over 100 people got a chance to try the sport. On display were various styles of atlatls, authen-

tic looking two piece darts with Paleoindian-type points, and different styles of Paleoindian flint points.

There was tremendous interest and as many as 500 to 600 observed with many making measurements and taking specifications to make their own atlatl equipment. The WAA address and various literature was available to spectators.



L to R. Dave Tickemyer, Mike Mewes, John Siebert, Krista Mewes (standing) and Bill Jacobsen.

Since there also was a bow and arrow contest at the Rendezvous, there were many archers who really enjoyed the chance to see and try truly ancient hunting equipment. Most were very impressed with the power and distance they could get with an atlatl.

One fan in particular, Donna Mueller, of Fulton, MO stayed and threw darts for at least 2 hours. Because of her enthusiasm and interest, we all voted her an honorary member of our group.

Additionally, we took signatures on petitions to get the Missouri Department of Conservation to allow deer hunting with atlatls. We were refused last year with the reason that, "the regulation says bow, and an atlatl is not

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ATLATLS IN THE SNOW!

By Leni Clubb

Atlatlers are a hardy lot! "Neither snow, nor wind, nor freezing cold can deter them from the throwing field" of an atlatl contest. (slightly paraphrased from the U. S. Post Office code.) And, the throwers at Lost Park, Colorado were no exception during the July 4th contest of the eighth annual Colorado Archaeological Society Encampment.

Twenty participants and a number of brave spectators huddled in blankets along the starting line or at the blazing campfire nearby as snow flakes fell and the cold wind blew. The beautiful green meadow and the forest... and the good fellowship made braving the weather worthwhile.



Heidi Daetwyler, Bev O'Neil, Chris Judson, Eva Cosyleon, Paul Leininger, Britt Newell, and Boney Cosyleon.

Contest winners were:

UNDER 16: First, Eva Cosyleon. Second, Dawn Moyer.

WOMEN: First, Bev O'Neil. Second, Heide Daetwyler. Third Chris Judson.

MEN: First, Paul Leininger. Second Boney Cosyleon. Third, Britt Newell.

GREATEST HONOR AWARD went to Paul Leininger.

FREE FOR ALL CONTEST WINNER: Women - Elizabeth English Men - Boney Cosyleon

Following presentation of awards, we all sat around a warm fire and made gooey "snores," (chocolate and marshmallows on graham crackers) and caught up on the past year's news from the various CAS chapter members.

Dear Bill,

This letter is to inform you that the 57th Mountain State Forest Festival will again this year host an atlatl competition.

The date is October 2, 1993 at 1:00 p.m. It will take place at Robin Harvey baseball field, Elkins, WV. Contestants will travel through five stations, around the bases, throwing at targets of varied size and distance, for a total of 20 throws. There will also be a distance throw. Prizes will be awarded. The competition will be limited to atlatls of materials available to primitive man. (cotton string allowed. Since this is the only atlatl competition in the state we would like to call it THE WEST VIRGINIA STATE ATLATL CHAMPIONSHIP. The judge this year will be Federal Judge, Robert Maxwell. We will keep you informed as we make the final plans.

William Good

FREMONT INDIAN STATE PARK, UTAH FIRST ANNUAL ATLATL CONTEST RESULTS

This June 5th, 1993 event was well attended with 37 participants and many onlookers. Contestants hailed from seven states: Utah, Arizona, California, Colorado, Montana, Nebraska, and Nevada.



L to R. Shana Martineau, Patti Thompson, Phil Lewis, Crystal Topham, Ray Ferguson, Brent Hardy, Wayne Brian, Leni Clubb, Jordan Topham, Travis Weimer, Gwen Leslie, Jeremy Kava, and Jim Ray.

AGE TEN AND UNDER: First, Brent Hardy of Washington, Utah. Second, Gwen Leslie, Carbondale, Colorado. Third, Jordan Topham, Monroe, Utah. Long Distance Throw, Crystal Topham, Monroe, UT.

AGE ELEVEN TO SIXTEEN: First, Travis Weimer, Monroe, UT. Second, Phil Lewis, Salt Lake City, UT. Third, Jeremy Kava, Elkhorn, NE. Long Distance Throw, Travis Weimer.

WOMEN: First, Leni Clubb, Ocotillo, CA. Second, Patti Thompson, Salt Lake City, UT. Third, Shana Martineau, San Carlos, AZ. Long Distance Throw, Shana Martineau.

MEN: First, Ray Ferguson, Pima, AZ. Second, Jim Ray, Belt, MT. Third, Wayne Brian, Mesa, AZ. Long Distance Throw, Wayne Brian.

GRAND CHAMPION AWARD: Ray Ferguson



ATLATLING IN STYLE! Gwen Leslie rides with Park Superintendent, Gordon Topham.