

The

ATLATL

"Too long have I hunted mammoth alone!"

Rich McWhorter

October 2002

The Newsletter of the World Atlatl Association, Inc
Margie Takoch, Editor
710 Fernwood Rd, Wintersville, OH 43953 USA
Email theatlatl@1st.net

Volume 15, Number 4

Atlatl Weights

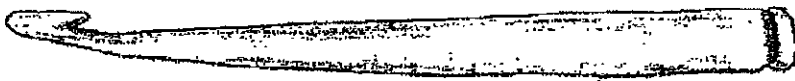
By Richard B. Lyons

North America is the only place in the world where stone weights were added to the shafts of atlatls. They were called Bannerstones, Loafstone, Boatstones, bar weights etc. They add stability, distance, and accuracy to atlatl use. One of the most important examinations of the atlatl and atlatl weights was a book by William Webb.

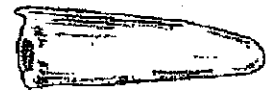
Webb was one of the foremost pioneers in the study of the atlatl. His posthumously published work "The Development of the Spear Thrower", University of Kentucky 1957, has long been considered the Bible on the archeology and physics of the atlatl. His work, however, has recently been reevaluated and come under criticism for both chronologies of the developmental sequence of Bannerstones, atlatl hooks, and the positioning of atlatl weights [Bannerstones etc.] on the atlatl shaft.

Information in a new book called "The Archaic Bannerstone [Its Chronological History & Purpose From 6000 BC to 1000 BC]", written and published by David Lutz, is shedding new light on atlatl prehistory. Mr. Lutz has provided us with an up to date and accurate chronology of Bannerstone sequential development, that is backed up by carbon 14 dating and excavations of stratified archaic sites. His chronology differs from Webb's in several aspects. Webb has bar and Loafstone weights being the first type of weights added to an atlatl shaft, and later evolving to Bannerstones. Mr. Lutz has concluded, from archeological evidence, that the first stone weight used on an atlatl was a fully stylized Bannerstone. It was called the reel type, [carbon 14 dated at 6070 BC by associated materials], and bar and Loafstone weights not occurring until the late Archaic to Early Woodland periods 5000 years later.

An objection is also made to Webb's sequence of antler atlatl hook development. In Webb's sequence he has the crochet type hook occurring first and followed by a "new" shorter type which allows the Bannerstone weight to be positioned closer to the hook.



Crochet type



Short type

One of Webb's most important assumptions was that the atlatl weights, over time, were moved closer and closer to the atlatl hook. Webb said that the shorter hook type allowed the weight to be moved closer to the hook than did the

ISAC RESULTS

By Lloyd Pine

Doug Miller is the new leader in the men's division by an "X" over Doug Majorsky. Miller's score is the second highest ever thrown and Majorsky's is now the third highest. The 97-XX by Terry Keefer in 1999 is still the world record. Ray Strischek added a point to move to a tie with Mark Bracken for third place. Pascal Chavaux joins the current top ten with a 92-XXX thrown at Tautaval in August. Although not listed below a great number of new personal bests were thrown during this quarter. The current list of men throwing 70 or better is the largest yet.

Melissa Dildine now leads the women's division with a score of 84-X. This is the second highest score ever thrown by a woman. Lori Majorsky's 85-X thrown in 2001 is still the world record. Kristine Lyons still holds second place. Lori Majorsky, last year's champion, is now in third place and Margie Takoch is the fourth women this year to throw a score of 80 or better.

Mike Waters continues to lead the youth with his 90-XX followed by Thomas Chavaux with an 87. Charlie Bracken joins the top youth with an 85 pushing Nick Mertz into fourth place. Eight year old Levi Miller joins the youth, throwing scores of 70 or better with his 75 thrown at Tyrone, PA in June. I believe this is the highest score ever thrown by an eight-year-old.

| Men | Top Scores- | | | | |
|--------|----------------|------|--------------------|--|--|
| Score | Name | Date | Contest | | |
| 96 XX | Doug Miller | Jun | Elkhart Lake, WI | | |
| 96 X | Doug Majorsky | Apr | Cartersville, GA | | |
| 95 X | Mark Bracken | Apr | Moundville, AL | | |
| 95 X | Ray Strischek | Jun | Meadowcroft, PA | | |
| 94 X | Terry Keefer | May | McConnellsburg, PA | | |
| 92 XXX | Mike Glenn | Jun | Flint Ridge, OH | | |
| 92 XXX | Pascal Chavaux | Aug | Tautavel France | | |
| 92 X | Gary Fogelman | Jul | Saegertown, PA | | |
| 91 X | Tom Mills | Apr | Valley of Fire, NV | | |
| 91 | Dennis Lantz | Mar | Turbotville, PA | | |

| Women | Top Scores- | | | | |
|-------|-----------------|------|---------------------|--|--|
| Score | Name | Date | Contest | | |
| 84 X | Melissa Dildine | Aug | Hancock, NY | | |
| 83 | Kristine Lyons | Jun | Levenworth, IN | | |
| 82 X | Lori Majorsky | Jul | Saegertown, PA | | |
| 81 X | Margie Takoch | Jun | Franklin, Grove, IL | | |
| 79 | JoAnne Fogelman | Jan | Turbotville, PA | | |
| 77 X | Sharon Keefer | Jul | Ft. Loudon, PA | | |
| 77 | Juliette Renouf | Mar | Tarascon, France | | |

| Youth | Top Scores- | | | | |
|-------|-----------------|------|--------------------|--|--|
| Score | Name | Date | Contest | | |
| 90 XX | Mike Waters | May | West Almond, NY | | |
| 87 | Thomas Chavaux | May | Buthiers, France | | |
| 85 | Charlie Bracken | Jun | Tyrone, PA | | |
| 83 | Nicholas Mertz | Apr | Valley of Fire, NV | | |
| 79 | Mason Miller | Jun | Flint Ridge, OH | | |
| 75 | Levi Miller | Jun | Tyrone, PA | | |

IMPORTANT ANNOUNCEMENT

ISAC Top Ten Awards

The following award policy for the ISAC was approved and ratified by the membership at the 15th Annual Meeting at Aurora, CO on June 15th.

TOP TEN AWARDS will be presented to the Top Ten persons with the highest ISAC scores in three (3) divisions – Men, Women, Youth (under 16). First Place Winners in each division will receive a plaque, the other nine winners will receive a certificate. All Awards will indicate the category – Men, Women, Youth, the standing/place in each division, the location of the ISAC contest in which he/she made the high score, the date, and the score achieved.

In addition, the OVERALL TOP TEN persons in the annual ISAC will be listed by score ONLY. This may include persons in any of the divisions according to their score. The person with the highest score for the year will be designated WORLD CHAMPION. Each person's place in Overall Top Ten will also be included on the plaque and/or the certificate.

SCORE SHEETS NEED IMPROVING

By Lloyd Pine

The headline says it all. After several years of the score sheets becoming more legible and more complete there has been a change for the worse. Some of the sheets are so bad that if I did not already know most of the names I would be unable to use them. Our data entry person that keeps the complete computer records and checks my results cannot use them as received. I have to print legible names so that she can enter the data. Addresses are often left off of the sheets. Remember that these sheets need to be legible enough that a readable copy can be made.

Mathematical errors continue to be almost nil and for this I thank you.

*Life is pure adventure,
and the sooner we realize that,
the quicker we will be able to treat life as Art.*

Maya Angelou

**Greetings
from the Wilds of Wyoming to the Atlatl World.**

By Russell Richard

It is my pleasure to report that the Foothill/Mountain Atlatl and Bow Invitational IV concluded successfully with no fatalities (except two bows, a dozen arrows and a couple of darts). This year the gathering was held in our third location (South Crow Creek, near Buford, Wyoming) and may prove to be the permanent site for the contest. We planted the US flag and claimed it as ours. Located in the southern Laramie Range, the setting consists of exfoliated Sherman granite outcrops amidst a small creek, with an open meadow adjacent on the upper slope. The sky blessed us with coolness and even some rain.

We threw our darts and shot our arrows amidst pine and stone, then aspen and grass, followed by sage and prickly pear. A grueling 42 shot course (21 targets, including the flying turkey) tested us all, but amazing shots abounded. Twenty-three champions emerged from the hunt to feast mightily at the Big Tent.

Several guests and interested folk also shared the fun. Two Cody Bowyers, Hal and Pat Lee, came to shoot arrows and left as atlatlists. Colorado Gary and Carline Luoma graced us with their astounding array of beads. Eduardo Vega journeyed down from the Black Hills to fling a few, James Petersen and Coop came over the mountain from Laramie, from Colorado the Kimball clan (who always bring the welcome rain) and ever helpful Brown folk were there, along with the always stalwart and true Tates.

We kicked aside the cowpies in the meadow and Shane Ryker (10 yrs) threw a fine ISAC score of 54 (with 2 misses). Regina Dodson threw her personal best (59), the rest of us also participated but don't want to talk about it.

The Cheyenne contingent has grown, we now number 10 or so casual/obsessed throwers who work like stevedores but have many a good laugh. With the aid of The Kids (Mariah, David, Jake) and Rose To The Rescue the magic happened. We always claim to be uncertain about next year, but in truth the contest will probably grow to include knife, tomahawk, and spear to partially compensate for the loss of the Fort Caspar contest.

A hearty welcome is extended to all for F/M A & B I V and watch for a possible last gasp throw to be held indoors in November/December in our area.

Best wishes for smiling ISAC's from the Wyoming tribe to all of you.

Atlatl Results:

Youth 2nd Amanda Kimball, 1st Keiko Long
Women 3rd Rose Clark, 2nd Regina Dodson, 1st Susie Brown
Men 3rd Charlie Brown, 2nd Gary Dodson, 1st Russell Richard
Russell narrowly became Grand Champion.

Bow Results:

Women 2nd Pat lee, 1st Ann Kimball
Men 3rd Russell Richard, 2nd Hal Lee, 1st Charlie Brown

➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡

"I still find each day too short for all the thoughts I want to think, all the walks I want to take, all the books I want to read, and all the friends I want to see." John Burroughs

THE FRENCH CREEK/SAEGERTOWN SHOOT

By Gary L. Fogelman

July 27th and 28th, 2002 witnessed all sorts of people heading to Saegertown, in Crawford Co., in the northwest corner of Pennsylvania. This event has a lot to offer the public that chooses to attend. Indian artifacts and fossils seem to go together in a way. Many of those who collect artifacts have other collections, and fossils are a favorite. Atlatl demonstrations were always a part of the show, as was flintknapping, so when the French Creek Chapter of the Society for Pennsylvania Archaeology offered to host a tournament and provide the awards, field and targets, the offer was readily accepted.

The weather has been a factor at several past events and threatened this one, but the rain held off during a hot, stifling Saturday and came at night. Sunday was the same, but the rain came earlier, about 3 in the afternoon, after the atlatl contest was over. A terrific thunderstorm moved in, with lots of lightning and heavy rain, some of the lightning striking close by the building we were in. Packing and hitting the road was delayed 1 to 2 hours because of the storm and it turns out there was a tornado watch in effect in the area during this period.

The Fossil and Artifact Show generally draws 200-400 people over the weekend and many of these visit out back to see what's going on, or come down for the talks and demonstrations on the atlatl provided throughout the day, and an opportunity to try it. There seemed to be a lot of activity over the two days.

The local contest was simple, but not easy. Five animal targets (groundhog, fox, turkey, deer, and bobcat) were pinned to bales. Three shooting stakes were placed at each target at distances beginning at 12-15 yards and increasing from there out to about 25 yards on the deer. Contestants went through and shot at the targets from the closest stake, then back through at the middle stake and through again at the longest stake. It turned out to be a good challenge. Scoring was 5 or 3 on the smaller animals, and 5-3-1 on the McKenzie deer target.

For the youth, Levi Miller, 8, was first with 7 points. Second was Amanda Miller, and third was Matt Maloney. Jonathan Hunt, Devin Johns and Ethen Johns also participated, and there were many other youths, and adults, active on the course throughout the weekend.

In the Women's division, JoAnne claimed first with a score of 11. Second was Lori Majorsky and third was Sharon Keefer.

Doug Majorsky, in his last event before going off to Paris Island and the Marine Corp, scored 30 on the course, good for first, followed by Terry Keefer and myself. Doug also claimed the Grand Champion plaque.

Over 20 people threw in the ISAC over the weekend. Scores of note, Lori threw an 82x on Sunday, and she moves up a couple of notches. Terry got one going on Saturday and was at 76 with 2 throws left when he uncorked a six, and then a 10, to end with a 92xx, but below his 94x already posted.

I got into one on Sunday, a little late, but it worked out and I ended up with a 92x, better than a previous 91 and moves me up a couple of notches. Several others had good runs but failed to capitalize.

Taking part throughout the weekend besides those already mentioned, were: Dana and Kay Klein, Andy Majorsky, Tom Kliber, George Miller, David Miller, Dave Johns, Akshiro M. (Japan), Paul Gleckl, Don Roberts and Bill Adams.

➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡ ➡

Brockway, PA Atlatl Contest

By George Miller

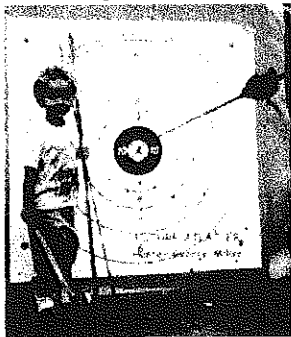
The 2nd annual Brockway, Pa. July 4th atlatl event went over with a big bang! Two days of atlatl competition, knappers breaking their favorite flint and Bill Hawker's tomahawk throw. Over 325 new people, young and old tried their hand at their first atlatl throw.

Thanks to Bruce, Mason, Dave Miller, Kyle Adams and Austin Smith, as instructors. They taught the newcomers how and why atlatlists can have fun. Ray Strischek, Athens, Ohio was declared champion by cracking out an 89 under windy conditions. Mark Bracken and Gary Fogelman followed him, both tied scoring an 86.



Lori Majorski left her mark by winning the ladies division with a score of 69. She beat out Sherry Bracken, scoring a 57, followed by Sharon Keefer with a 54. What lady is going to wear the good luck charm necklace? (OOGA BOOGA!)

The youth event had plenty of action, with 11 year old, Mason Miller, making his hometown proud by scoring 1st place with a 73. Charles Bracken, from Georgia followed him with a score of 69. The 4th of July little firecracker, 8 year old, Levi Miller, Brockway, shot a 47 at 15 meters and finished with a 64. Ray Strischek, 91xx men; Lori Majorsky, 82xx ladies and Charles Bracken, 57 youth. won the Little Toby local round These are great scores considering the crosswinds and heat up on the Allegheny Plateau in North Central Pennsylvania.



David Miller, Brockway won the tomahawk throw with Mark Sunyak knapping the best flint point. Move over world atlatl throwers: there seems to be a movement coming with a lot of new atlatlists coming aboard.

An adult may see wisdom manifested in its highest form by watching a child's boundless capacity for making the most of today.

1st Annual Perseids Primitive Arts Weekend

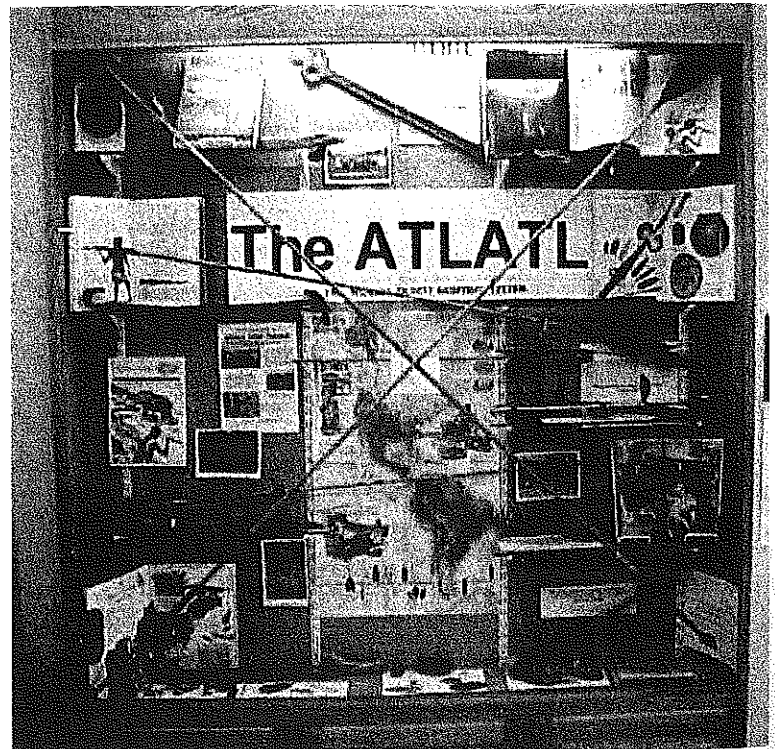
By Ben Brauchler

Hi all from the *Chautauqua Spears Atlatl League*,

Just a brief report from the 1st Annual Perseids Primitive Arts Weekend in Cassadaga, NY while it is still fresh in my mind!

We got started with a twilight ISAC on Friday evening, we should have had flashlights by the end! Scores were as might be expected when you are heaving your darts in the general direction and only know if they hit by the *thwack!* Conditions were better on Saturday with ISACs in the late morning and afternoon and the (surprisingly difficult) local field course all day. High scorer on the local was Lori Majorsky with a 12. She is our Grand Champion for the weekend. Flintknapping, playing with the Angora goats, swimming, drumming and a communal goat stew (you have got to try this!) wrapped up Saturday. We finished off the weekend Sunday with more locals and a final ISAC. Bob Chaffee from the Genesee league drove about 2 hours home Saturday and was back bright and early Sunday to throw again! Way to go Bob!

We have already booked Camp Gross for the 2nd Annual Perseids Primitive Arts Weekend on August 8, 9, 10, 2003. We are planning events starting from 5 p.m. Friday with a torch lit ISAC (try that!). Friday evening, drumming, spinning, flint knapping, weaving, and our ferociously difficult local field course! (it was tough, Lori got 12 out of a possible 30 points on our hidden animals). We figure if we start now, we should be able to at least double our attendance (31).



Library Display

Steve Barnett set up this Atlatl display in the Wells Public Library in Albany, Ohio. The display includes items made by Ray Strischek, Mamerto Tindagon, Richard. Lyons, Don Roberts, TAA and Mark Littler of the Smithsonian Inst.



Museum of the San Rafael
By Janet Peterson & Bob Sizemore

We had a great time with our Atlatl Competition at the Museum of the San Rafael, Castledale, UT, thanks to Jim Ray, Ray Thompson & Pete Weimer. They were absolutely wonderful to help us work our way through. We didn't have as many participate this year as last, but it was great fun and we can't express our appreciation enough to the above men for their great support.

In the Men's category 1st place was won by Russell Richard, WY; 2nd place by Ray Thompson, UT; and 3rd place Pete Weimer, UT.

In the Women's category 1st place went to Rina Pikyavit, UT; 2nd place to Kaye Weimer, UT; and 3rd place to Pattie Thompson, UT.

12 to 15 yr. Category 1st place went to Landon Huntsman, UT; 2nd place to Logan Huntsman, UT, and 3rd place to Mary Pikyavit, UT

6 to 11 yr. Category 1st place went to Hayden Snow; 2nd place to Justin Simmons; 3rd place to KSE Kofford.

The Grand Champion was Russell Richard from Wyoming. We want to thank your great organization for taking us under their wing and helping Emery County become acquainted with this wonderful piece of ancient Indian weaponry.

If you like, all American, down home entertainment and spear throwing too, Castledale is the place to be. There's an outdoor pageant, a professional rodeo, and a fair, a parade, live music and entertainment of all kinds. Arts and crafts displays and all the museums are free.

Around the area is some of the best prehistoric rock art you will ever see. Outstanding views of incredible canyons and a dinosaur quarry. The American field round, and an ISAC too! What more could anyone ask for. Watch the newsletter for next year's schedule. Don't miss it.

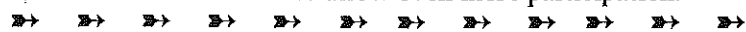


Letchworth
By Cheryll Berg

The Stone Tool Technology Show (August 23, 24, and 25) keeps growing every year and that includes participation in the Eastern Seaboard Atlatl Contest at Letchworth State Park in western New York.

A new site for the show this year caused some organizational confusion as far as space for beginners, local contests and ISACs, but nevertheless the "Piggly Wiggly" local contest finally got under way. Bob Berg's three cut out pig targets gave atlatlists a chance to compete, with Gary Fogelman of Turbotville, Pa. coming in with the most points at 115. Jack Rowe of Sayre, Pa. followed with 100 points and Mike Waters of New York came in third with 90 points. The results made Gary Fogelman the Grand Champion for this year's contest.

There were lots of participants for ISAC contests over the three days of this year's event. Next year, plans are to allot more space for the atlatl field to allow even more participation.



Sixteenth Annual WAA Meeting

May 23 through May 26, 2003— Four full days for the Sixteenth Annual WAA Membership Meeting at Wilder Creek, Marshall, MI. So much will be going on besides atlatl events and the Michigan Atlatl Marathon (you won't believe the number of targets!).

The Primitive Archery Rendezvous with bow making workshops, flintknapping, and all sorts of primitive skills and dozens of vendors also are planned.

On Friday evening there will be a Board of Directors' Meeting and on Saturday evening, a dinner followed by the Annual Membership Meeting. This is an opportunity for many of the Eastern and Mid-Eastern members to attend and participate in the business of The World Atlatl Association.

The Officers and the Board of Directors urge you to attend and learn more about your organization. Fun stuff during the day and WAA business two of the evenings. We are looking forward to seeing many of you in 2003. It will be WILD!



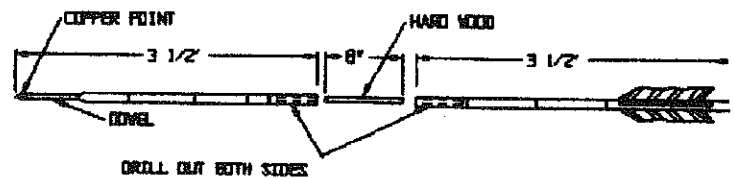
Two Piece River Cane Darts
By Wayne Brian

Are you tired of transporting those 7 foot darts from contest to contest, maybe poking holes in your upholstery, hanging them out the window, bending them to get them in the car, or having to tie that PVC pipe case on the outside of your vehicle? Well I have the answer. Cut and splice them in 2 pieces as I have.

I have done just that, thrown them for months with no negative effects. Here is what you do:

Cut the dart (we're talking river cane) in half as best to insert a hard wood dowel about 2 to 3 inches in each half. Lightly bevel your cut edge, wrap both ends with sinew twice on the receiving half and only once is necessary on the fixed insert half. After wrapping, drill out the cane to receive insert. Glue the fixed insert in. Make a good snug fit for the receiving half. To add insurance, apply bee's wax to insert joint. You may have to make corrections on the dart alignment with a little heat. Make it straight and then mark it with index marks so it goes together in the same alignment each time and waterproof your sinew and you are ready to go with 3 foot 6 inch sections in a quiver.

Breakdown of the dart



If you don't want to go to all the bother, I have some darts on hand all ready to go with copper points and barred turkey fletches. Wayne Brian, 824 W. Kiva Ave, Mesa, AZ 85210; 480.491.8460



Letters to the Editor:

To the Atlatl:

I'm fairly new to this so I don't know if this has been mentioned before but I was watching "The 13th Warrior" the other day and noticed that, in at least one scene, the cannibals were using atlatl to fill a Viking full of darts. Throwing from horseback, no less! Seeing this, I wonder if there are any other films that use the atlatl. Very few, if any, I suspect.

Kevin Geiselman

»» »» »» »» »» »» »» »»

To the Atlatl:

Is not an atlatl a spear-throwing device?

I live in Florida and lust to examine archaeological sites which -I expect- must exist off shore and on the Brahma banks- look at the water depths there and consider sea level five to fifteen thousand years ago. consider the "Bimini Wall".

I am quite new to the net and wonder just what satellite imagery, in various portions of the spectrum and at what resolutions, might show in terms of ancient "trails" and other clues to undiscovered sites in your area. The old "silk road" images showed the location of Wabar and the radar images the most extremely extensive Central American canal networks.

Any thoughts?

Regards,

Scott White,

»» »» »» »» »» »» »» »»

To The ATLATL,

A few weeks ago, I was introduced to the atlatl at Head Smashed In Buffalo Jump in southern Alberta while on vacation. After a few pathetic attempts, I accidentally got the hang of it, and threw it quite a distance, 155.9 feet, and won the contest. Since then, I've been trying to find an atlatl group here in Alberta, and I've been unable to find anything. Do you know of any groups around Edmonton in Alberta?

Any information would be greatly appreciated.

Thanks in advance!

~~*~*~*

Louisa

Edmonton, Alberta, Canada

Si hoc legere scis nimium eruditionis habes.

»» »» »» »» »» »» »» »»

Hi Margie,

Did you get the invite for our new Yahoo Group site? Just in case you missed it the web address is:

http://groups.yahoo.com/group/michigan_atlatlists/

Also, now that we've settled on a date for the '03 WAA meeting, you may want to add that the '02 Atlatl Marathon at Wilder Creek story is available on Chris Oberg's excellent atlatl site at: <http://www.msu.edu/~oberg/marshall/wilder2002.html>

Wilder Creek's web address is:

<http://hometown.aol.com/buoygenius>

Besides a bunch of atlatl events and happenings there are always ongoing bow making workshops, flintknapping, all sorts

of primitive skills and dozens of vendors. Once I figure out how to use the Yahoo site (I was just getting comfortable with Comm0!) I will keep a continually updated section just about the event at Wilder Creek.

Jim Gilligan

»» »» »» »» »» »» »»

Margie:

Ray did not like the \$\$\$\$ involved at communityzero, so he has moved Ohio Atlatl to:

<http://groups.yahoo.com/group/ohioatlatl>.

He and I will be working to transfer information to this site.

Thanks, Connie

ohioatlatl@yahoogroups.com

»» »» »» »» »» »» »»

Hi folks,

We've moved the PaleoPlanet and California Atlatl Association site. Here's a canned message telling you how to get there and how to sign up. We hope you come on over.

Tom Mills

Here goes:

We'll be using it as our online meeting place. The ezboard is very simple to use. When you go to my ezboard, you first see the main ezboard screen, which will show you all my forums. Just click on one to join the discussion. If you want to post something, you can click on NEW TOPIC (which starts a new conversation), or click on one of the existing conversations (threads) and hit ADD REPLY to make your own comment about a particular topic. If you need more help, there is a [HELP] link (upper right corner) that has a lot of useful information. The software is absolutely phenomenal, I think you'll really like it too.

If you register, you get to have a lot of neat little personal options, like your own custom signature, your own little icon, your own personal home page link, and many other neat features. Remember that none of your information (email, etc) is ever given out without your permission.

Here is a link to my ezboard:

<http://pub3.ezboard.com/bpaleoplanet69529>

My online community is also a member of the ezboard Network, which is a group of 1000s of other online communities. You'll be able to not only participate in mine, but you can find other online communities as well. Just look for the PUBLIC EZBOARDS link. I'm eager to hear your comments and suggestions, hope to see you online!

Best regards,

Tom Mills

»» »» »» »» »» »» »»

For Sale

Genuine Papua New Guinea atlatls-
\$85 to \$95 each, post paid in the USA.

Ron Perry, 430 W. Speedway, Tucson, AZ 85745
520.623.2205

»» »» »» »» »» »» »»

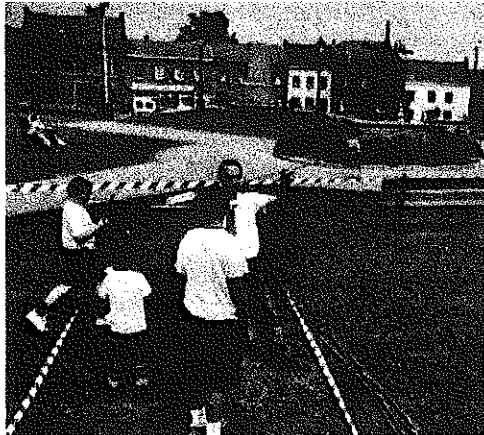
Dear Margie,

I read the last *The Atlatl* with pleasure and discovered your "What made 'em do it" with interest. I didn't know a city existed in the USA named Athens. Have you a Rome, Paris and Brussels too? (I joke...but it exists maybe all the same)

We took part in "The Day of the Cave of Spy" on Sunday Aug 4. You know, 2 skeletons of Neanderthal man have been found there during the 19th century. I learned Sunday that the man of Spy in fact was a woman!

Steve helped in the atlatl demonstration. Alexandre, our 5-year-old helped with pride, too.

There were other attractions like silexcutting (Ed. Note: I do not know what this is), prehistoric method for lighting fire and weaving ropes from



stinging nettle fibers and other materials prehistoric man could have the use of. Demonstrators were excellent, public was enthusiastic and interested. It was



an enriching day for everybody in spite of the bad weather.

We didn't take part in any atlatl contests this summer because we changed our holiday's program because Steve crashed his ULM in June. Don't worry, he is in good health but the ULM plane is broken....So our flying projects with our friends of Mas d'Azil were not possible.

We plan to take part in contests in September, October and November. Write you later!
Anne-Francoise



Afoot and light-hearted I take to the open road,
Healthy, free, the world before me,
The long brown path before me leading wherever I choose.
Walt Whitman



Note from the Editor

Hi Folks,

Well once again, Frank and I had a great Atlatl Vacation!

We went first to Letchworth NY at the end of August. We got to meet our new WAA President, Tom Mills...what a great guy! I wish we had more time to spend with him. We also got to meet Paul Weigel, from Germany. His father Uli (who is a WAA member from Germany) set him up as an exchange student with Bob Berg and Family from Thunderbird Atlats, Paul will be doing his senior year in Candor NY. Paul understood English like a native! Letchworth is a large Flintknapping event along with the Atlatl, Civil War encampment and French/Indian Encampment. There was soo much to do and see! The park itself is 17 miles long with 3 waterfalls and a 600-foot gorge running through it!

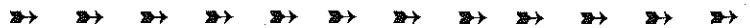
The following weekend was our annual Flint Ridge Event. This also is a big Flintknapping event and Atlatl Competition. Ray Strischek has targets and equipment set up to teach the public. And there were lots of them to come through! There was a slide show on Friday night that was very interesting.

We had a break for the following weekend and spent the time cutting down some dead trees in the yard....Atlatlting is much easier!

Then the next weekend we headed out for Cahokia on Thursday. Friday afternoon we helped Ron Mertz set up the targets and distances. Then Friday evening we had an ISAC. On Saturday it was almost non stop throwing! There was the European course to throw twice, the EastWest course to throw as many times as you wanted and the Hunter's Challenge to throw. I helped Ron with the score sheets and winners and before we knew it the pizza had arrived! Then we had a very interesting talk/slide show by Bill Isminger from Cahokia about sun circles such as Woodhenge there at Cahokia. Sunday was a short repeat of the day before, with ISACs being thrown early and many folks leaving soon after.

This coming weekend we will be in Somerset, PA for the Penna. State Championships and probably the last time we will get to see some of our atlatl friends till next year! Which makes this a bittersweet weekend. Visiting with friends at these events is the best part of it all!

Margie
Atlatl...It's the Fling Thing!



Somewhere, something incredible is waiting to be known

Carl Sagan

Letter to the Editor:

Dear atlatlists:

I met Paul Weigel's father this morning. You know Paul is a very good thrower. It's a gene pool: his father Uli won the European contest today in Belgium. Thomas (my son) was second, and I was third.

Pascal Chauvaux



(Editor's note: Paul Weigel is currently living in the United States as an exchange student with Thunderbird Atlatl's Bob Berg and family. Many of us got to meet Paul and throw with him at Letchworth and Flint Ridge. He is a great kid and a good atlatlist! Frank got to see him throw nine 10's in a row in the Ohio Standard Accuracy Contest!)

Photos:

Left:
Uli Weigel (on the right)
and Pascal Chauvaux-



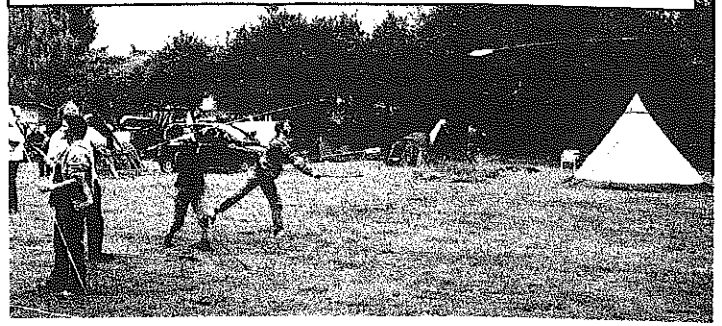
From the left to the right: Mervig Fiedler (Germany), Pascal Chauvaux (Belgium), Johann Tinnes (Germany), Gerard Beauquel (France) and Carine Billon (Belgium)



If you have knowledge, let others light their candles by it.

Atlatl contest in Schwerte (Germany)

June 23rd, 2002

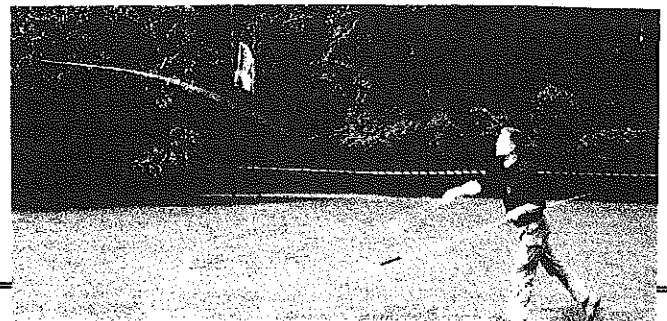


Photos by

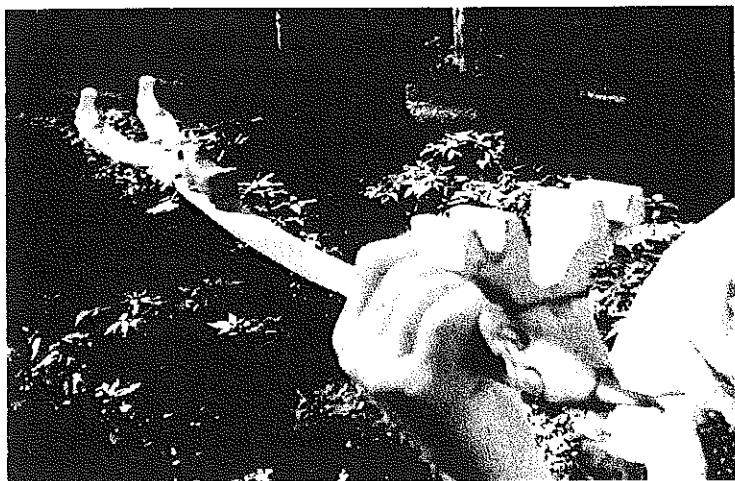
Pascal
Chauvaux



Johann Tinnes in Belgium



Atlatl to throw two darts –
 Built by George Miller Brockway Pa.

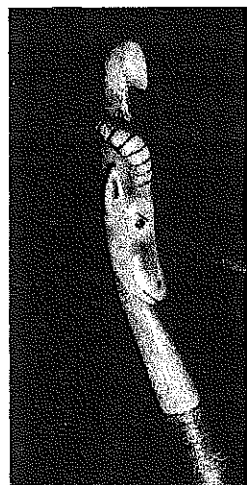


George says:--“It takes more power to throw-My grandson Levi threw a 10 and 8 the first time he threw it. For accuracy, time will tell. Do you know if anyone else has built one?”



Nice contest in Germany photos by Pascal.

: Ulrich Stodiek's atlatl (reproduction of an atlatl found in Le Mas d'Azil cave)



Emmanuel Demoulin (26 meters target)



Emmanuel (8 meters target)



(France)

European contest results:

- 1) Thomas Chauvaux (Belgium)
- 2) Pascal Chauvaux (Belgium)
- 3) Christian Foppa (Switzerland)
- 4) Bruno Roesch (France)
- 5) Emmanuel Demoulin (France)

ISAC:

- Pascal Chauvaux (93-XX)
- Ismael Yahemdi (85)
- Christian Foppa (84-X)
- Fritz Mischler (83-X)
- Curdin Foppa (74)
- Thomas Chauvaux (72)
- Irmgard Bauer (61)



Pennsylvania Story
 By Fred Carroll

Fritz Schnek was reading the weekly Valley News and sipping coffee. The sports section had an article about an upcoming Atlatl match and it intrigued him.

“Atlatl”? He asked me.

“ Was that a kind of hatchet the Indians, Shawnees and Delaware’s used a couple of hundred years ago when they a roamed these mountains”? I responded.

I could tell Fritz had another attack of curiosity. The Atlatl match had hold of his attention. We left Shirley’s diner; I, to do some yard work, and Fritz, to pursue his new quest.

When I called his house that night, I could tell by the busy-buzz on the phone that Fritz was using his computer to get information off the Internet. He would soon be an expert on Atlatology. Eventually, we would all know more.

Later that week, again over coffee at Shirley’s diner, Fritz expounded on atlatls. He told me that the Atlatl was a prehistoric improvement in spear throwing. It was a way to throw a light spear farther and harder and easier. It’s basically a handle that propels the light spear by pushing it. In effect, it makes the thrower’s arm a longer and faster throwing arc in setting the spear on it’s way to the target. It made for a pretty good weapon until the bow and arrow replaced it a couple of thousand years ago.

Fritz wanted to try one. I did too. We would make one!

The information that Fritz had downloaded from various web sites was voluminous. There was even an atlatl association with it’s own page for discussions. Fritz subscribed. Serious treatises regarding the physics of the atlatl were studied before the building of our atlatl started. What would we make our atlatl from? Natural or man-made hi-tech materials were discussed over beer and sketches one evening. Fritz first thought that traditional materials would be best, but I, being by nature lazy, opted for what was the easiest. We would make our atlatl from stuff on hand! Materials were gathered: broken fishing rods, fly-tying string and feathers, and an old golf club were assembled on Fritz’ well-equipped workshop bench.

More beer was consumed as the plan grew into a material device from the sketches and accumulated junk. The evening passed in contented but beery creation. Testing was next, but caution prevailed till the next day.

We met next morning at the diner for coffee. Where would be a safe place to let fly the atlatl? The empty field West of town should be safe and free from neighbors’ eyes if the thing backfired or otherwise malfunctioned. We thought.

Late that very afternoon Fritz, the homemade atlatl, and I assembled in the fallow field with a big cardboard box for a target. Fritz threw first. The spear wiggled and flashed through the air! Wow. It went and went till it disappeared in the weeds. There was a hole in the box where the spear shot through and kept right on going. Good thing we made more than one spear.

My turn was next. I loaded the spear and let fly in a baseball pitcher’s windup. No strike...ball. High and outside. The spear flew over the box and was last seen heading toward Ohio.

Out of ammunition, we returned to Fritz’ workshop. Atlatling was fun, but the sport required more spears and practice. We would go to the upcoming Atlatl match as appreciative observers



Straightening Georgia's World Record Setting Cane

By Mark Bracken

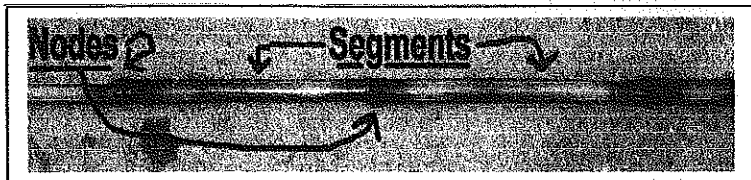
The first step is seasoning your cane. You can do this by storing the cane in tied bundles of twelve or so. In the winter, I dry my cane in the house where it is warm and dry. In the summer, the attic is the place of choice. Drying the cane should take about three to six months. In my opinion, it is best to **first fully** season the cane before attempting to straighten it. The method you use should not be one that uses extreme heat; this might crack the cane.

Once it has been seasoned, note that it may still have a green color to it, this is ok. Now that your cane is dry, sand or cut the little buds at each node, take great caution in removing the two or three buds from the skinny end. You should leave a little extra material on these. The reason is this is the area that is susceptible to breakage while straightening. Now... trust me on this... soak it in water for 12 hours, 24 hrs being max, to rehydrate it. If you try to heat and bend cane that is to dry it will scorch quickly or unexpectedly break. The added moisture will simply evaporate during the straightening process. You can soak your cane in a PVC pipe or a creek, pond or any other favorite wet spot that totally submerges it.

The next day, cane out of the water and while its still wet wipe it clean with a cloth. Use dry heat not steam to do your straightening. I use a propane burner, turned down very low, like you would use to boil a big pot of peanuts. {yum}.

This process is a five-step deal,

First doing every other space between the nodes, (look at the picture for my definitions of "nodes" and "segments") Then doing the rest of the spots between the nodes.



Step three is straightening every other node.

Step four is the remaining nodes.

Finally step five, fine tuning the dart and hitting those stubborn spots. The reason for this is to prevent yourself from working to close to an area still hot and disturbing your previous work.

Now lets get started. Start by working on the areas between the nodes. Lightly and evenly brown the crooked area with a twirling motion being careful not to burn it. The cane should take on a rubbery consistency when enough heat has been applied. Carefully bend it over your thigh, it's best to use a leather pad to prevent burns to you leg. I suggest you slightly roll the cane back and forth as you bend it to prevent kinking. You can slightly over bend it and return the section to straight; this prevents a finished dart from warping back to its original shape. Some bends are just too big to do this, use your best judgement.

Now getting back to where we were. Straighten between the nodes doing every other one; don't panic if it looks like a banana... It should.

The reason for doing every other node and segment is to prevent rebending the area already straightened. Another important tip is to work on three shafts simultaneously. This is to allow each section to cool. It is also important to work on the segments first. If you do the nodes first, they will tend to bend back as you straighten the adjacent segments. Trust me on this. Also as you reach step five you can test the dart on the floor by holding the nock end and rolling it, the dart is finished when it rolls with good balance. How perfect you make it is up to you. But remember it must have balance.

Here are some more helpful hints. It is best to start on your worst piece of cane. If you break it, don't discard it. Keep on practicing on it to learn the material's limitations. Don't worry about small kinks in your finished darts, they won't affect performance. On huge bends that you are unable to get perfectly straight you can correct this by bending an area up or down from the bad area and still achieve a well-balanced dart. Don't scrape the natural waxy coating off the dart, it acts as a natural moisture barrier.

The exception to this is the area to be fletched. The best result I have achieved is to dip the nock end of the dart in a varnish or lacquer to help in the adhesion of the feathers. I use a four fletch jig that I designed to apply all four feathers at once. A good choice of cements to use is a product called Duco household cement. I purchased mine at K-Mart, it can be found at Wal-Mart also. It's less expensive than arrow fletching cements and dries faster.

Your new cane darts do not have to be foreshafted. I glue in my copper points with five-minute epoxy or "j-b weld". The points do not have to fall on a node to be strong! I like to use unwaxed dental floss for hafting points. I wrap them about 2 inches up the dart from the point, this prevents the shaft from cracking in the event you hit a concrete wall, automobile or mastodon skull. Finally I coat the hafting cordage with more five-min. Epoxy.

If you would like to contact me for any of my products or have any question or suggestions you can reach me at crackinbracken@juno.com.

Thanks I hope this information will be a benefit to you!
Mark Bracken



Pennsylvania Atlatlist in Sports Illustrated Magazine

Chuck Butorajac from Ligonier, Pennsylvania was in the Scorcard/Sports Beat section of the July 8,2002 issue of Sports Illustrated. The Sports Illustrated reporter came to the Meadowcroft, Avella, PA atlal Competition on June 23rd. If you haven't seen this, get to a library and ask to see the back issue! After the issue came out, Chuck was called by Jay Leno to do a TV interview! Chuck is hoping to find out more after the summer hiatus of the Jay Leno Show this fall.



Why Do They Throw?

By Anne-Françoise Cabaraux

With the collaboration of Marie-Jeanne Robert and Steve Cabaraux

Jacques Pernaud , 39 years old

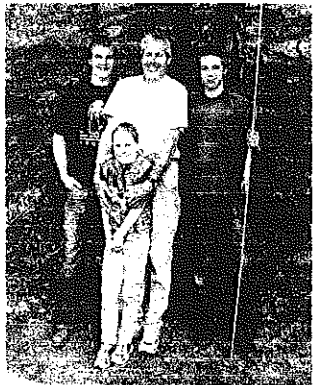


Préhistorian, curator of the museum in Tautavel, Tautavel, France

As a child Jacques was already interested in archaeology. He has participated in excavation holidays since he was 15 years old. He studied later to become a prehistorian.

In 1991, Jacques was the Tautavel museum curator since 6 months when he went to Mainville for an archaeologist meeting. The subject was "Prehistory and children". Each partaker presented techniques they used to make children discover archaeology on an attractive way. He learned there to light fire in a prehistoric way and observed Fernand Collin (Ramioul, Belgium) demonstrating the atlatl throw. He went then to atlatl contests and appreciated the atmosphere. He continues to go to the contests he can for the pleasure of seeing the others' enthusiasm.

Uli Weigel ,52 years old, with his children Max, Lina and Paul,



Art and sport teacher, working now in the faculties for the training of future sport teachers, Warendorf, Deutschland Uli went for a bike ride in Oerlinghausen (Deutschland) with his family and noticed a poster announcing the atlatl contest. He was puzzled by this (for him) unknown technique. .

As he was going in for a lot of different sports and taking regular part in decathlon, he was surprised that a sport could exist he didn't know about. Martin Schmidt (Director of the museum of Oerlinghausen) explained to him the material and throwing method. Uli made rapidly an atlatl and some arrows with material he had at home and then trained in his garden. He took part at the Oerlinghausen contest of the following year and met there other partakers from Germany, Belgium and France. He shared the others' experience and adapted his throw material for better allowance. His new contacts led him to Ramioul (Belgium), Crepy en Valois (France)...

He tries to participate each year at 3 contests. He continues to throw for the pleasure of meeting and communicating with people, for the cultural visits he can do thanks to the contests.

Russell Richard, 47 years old



Prehistorian, Wyoming, USA

As a little boy, Russell was fascinated by the old things his grand parents had at home, wood stoves, oil lamps. He began to collect artifacts. He was interested in it, he wanted to know more and he studied archaeology.

In 1992, he participated to an initiation to atlatl during an archaeological field school. He found he could do and went further: He participated in 1993 at his first contest in Fort Casper in Wyoming. The people he met were very friendly, so he went further to atlatl meetings and organized contests himself. He continues because he appreciates to meet friends thanks to the contests. Atlatl is also an excellent purpose to organise travels !

Pascal Chauvaux, 43 years old



Draftsman, Cerfontaine, Belgium

An office colleague invited Pascal to go with him on an excavation field not far from his work. He discovered so an 1800-year-old Roman house. He was amazed it was still possible to discover such an old vestige. He was then very interested in the old past and joined the CEDARC (Centre d'Etudes et de Documentations Archéologiques).

He went in 1989 to Cologne with Pierre Cattelin (Curator of the CEDARC and of the museum « Le Malgré tout » in Treigne) for an atlatl contest. He won this contest. This success led him to go further with the atlatl. He helped Pierre organise the contests and accepted later to orchestrate the organisation of contests in Europe. He made contacts with the American atlatl throwers. He passed the buck to others for the European organisation some years ago but keeps naturally contacts with his friends. If sport performance was his motivation before, he now continues to throw for the pleasure of meeting friends.



How Hard Does It Hit?

A Study of Atlatl and Dart Ballistics

Daryl Hrdlicka

Jeffers Petroglyphs Historic Site, July 1, 2002

INTRODUCTION:

Everybody knows that an atlatl and dart make a powerful combination. But nobody ever seems to know exactly HOW powerful! On the internet, you can find pages that say it's 3 times as powerful as throwing a spear by hand, and others that say it's 100 times more powerful. That's a lot of difference, and nobody ever says how they came by that figure.

To find out which was correct (or nearest the truth), I sat down and calculated how much energy is actually present in an atlatl/dart combination, and then compared it to other projectiles. The energy is measured in two different ways – Force (momentum), which is how hard the projectile hits the object; and Kinetic Energy (the stored energy present in the projectile), which determines how much damage it does.

The formulae I've used are standard physics equations.

- Force = Mass * Acceleration
- Kinetic Energy = $1/2 * \text{Mass} * \text{Velocity}^2$

CONVERSIONS:

Bullets and arrows are measured in grains and feet per second (fps). Darts and spears are measured (if ever) by ounces and miles per hour. Since we need to use the same units of measure to get any meaningful results, here are the conversion factors I used.

- 1 pound = 7000 grains
- 1 ounce = 437.5 grains
- 1 mile per hour = 1.47 feet per second
- 100 grains = .014 pounds

Mass (American) is measured in "slugs". Slugs are calculated as the weight in pounds divided by the pull of gravity (32.2 ft/sec/sec). A one pound object would have a mass of .031 slugs.

Acceleration (American) is measured in feet/sec/sec. Since we're only concerning ourselves with 1 second of time, the velocity (in feet per second) will work.

A unit of force (American) is a "pound". A unit of kinetic energy (American) is a "foot pound".

PROJECTILES:

I decided to use a variety of projectiles, in order to show where each ranks in terms of force and kinetic energy. The projectiles can go faster; these are just the speeds I'm using for calculation.

- Light Spear: 2 pounds, 50 mph (equivalent to a javelin)
- Heavy Spear: 5 pounds, 25 mph (equivalent to a Roman pilum)
- Light Atlatl Dart: 4 ounces, 100 mph
- Heavy Atlatl Dart: 6 ounces, 50 mph
- Primitive Arrow: 500 grains, 150 fps
- Modern Hunting Arrow: 540 grains, 220 fps.

FORCE (MOMENTUM) CALCULATIONS:

Spear/Darts/Arrows:

| | | | |
|-----------------|------------|----------|----------------------|
| Light Spear | 2 pounds | 73.5 fps | 4.57 pounds of force |
| Heavy Spear | 5 pounds | 37 | 5.75 |
| Light Dart | 4 ounces | 147 | 1.14 |
| Heavy Dart | 6 ounces | 73.5 | .86 |
| Primitive Arrow | 500 grains | 150 | .33 |
| Modern Arrow | 540 grains | 220 | .52 |

Handguns:

| | | | |
|-------------|-----------|-----------------|---------------------|
| .22 LR | 40 grains | 1060 muzzle fps | .18 pounds of force |
| 9mm para | 115 | 1155 | .59 |
| .38 Special | 110 | 995 | .49 |
| .357 magnum | 125 | 1450 | .80 |
| .44 magnum | 180 | 1610 | 1.28 |
| Colt .45 | 225 | 920 | .92 |

Rifles:

| | | | |
|------------|-----------|-----------------|---------------------|
| .22 Hornet | 46 grains | 2690 muzzle fps | .55 pounds of force |
| .30-30 | 150 | 2390 | 1.59 |
| .30-06 | 180 | 2600 | 2.08 |

The force (in pounds) was determined as follows:

Light Dart:

Force = Mass (.25 pounds / 32.2) * Acceleration (147 feet per second) = 1.14 pounds of force

.357 Magnum:

Force = Mass ((125 grains / 7000) / 32.2) * Acceleration (1450 fps) = .80 pounds of force

Force (momentum) is a measure of the impact of the projectile. This would be the "stopping power". A light dart moving fast has more impact force than the arrows, nearly all the handguns, and some rifles. A heavy dart, moving at half the speed, still has as much impact as a Colt .45 handgun. All of these are FAR behind the spears, however, which have more momentum (and thus more stopping power) because they weigh so much more.

Force determines how hard the projectile strikes the target, but is **NOT** the measure of how much damage it causes. That is determined by kinetic energy.

KINETIC ENERGY:

Kinetic energy is the energy involved in motion, and is measured in foot-pounds. There are many forms of kinetic energy, but the one we are concerned with is called **translational** (the energy due to motion from one location to another). It is a measure of the stored energy within a projectile, and determines how much damage it causes.

Kinetic energy increases exponentially as speed goes up. If Object A is moving twice as fast as Object B, object A will have four times the kinetic energy (mass being the same).

KINETIC ENERGY CALCULATIONS:

Spear/Darts/Arrows:

| | | | |
|-----------------|------------|----------|---------------------------|
| Light Spear | 2 pounds | 73.5 fps | 167 foot pounds of energy |
| Heavy Spear | 5 pounds | 37 | 106 |
| Light Dart | 4 ounces | 147 | 84 |
| Heavy Dart | 6 ounces | 73.5 | 32 |
| Primitive Arrow | 500 grains | 150 | 25 |
| Modern Arrow | 540 grains | 220 | 58 |

Handguns:

| | | | |
|-------------|-----------|-----------------|-----------------|
| .22 LR | 40 grains | 1060 muzzle fps | 100 foot pounds |
| 9mm para | 115 | 1155 | 391 |
| .38 Special | 110 | 995 | 242 |
| .357 magnum | 125 | 1450 | 583 |
| .44 magnum | 180 | 1610 | 1063 |
| Colt .45 | 225 | 920 | 423 |

Rifles:

| | | | |
|------------|-----------|-----------------|-----------------|
| .22 Hornet | 46 grains | 2690 muzzle fps | 740 foot pounds |
| .30-30 | 150 | 2390 | 1902 |
| .30-06 | 180 | 2600 | 2701 |

The kinetic energy (in foot pounds) was determined as follows:

Light Dart:

$$KE = 1/2 * (.25 / 32.2) * (147 \text{ fps} * 147 \text{ fps}) = 84 \text{ foot pounds}$$

.357 Magnum

$$KE = 1/2 * ((125 / 7000) / 32.2) * (1450 \text{ fps} * 1450 \text{ fps}) = 583 \text{ foot pounds}$$

Kinetic energy, as stated, is the measure of the stored energy of the projectile and determines how much damage is done. A bullet, because it is flying so fast, has incredible amounts of kinetic energy. When the energy is released (by impact with the target), it moves in a "shock wave", which expands as it travels. That is why the exit wound of a bullet is larger than the entrance wound. This does not occur with a slower-moving projectile, such as a spear, dart, or arrow. These merely penetrate the target. Damage is limited to whatever the projectile passes through, so aim is much more important.

The spears, which have such incredible amounts of momentum, have comparatively little kinetic energy. Similarly the darts have less kinetic energy than any firearm, even a .22 caliber handgun.

Does this mean that the atlatl and dart (and spears, and arrows) are ineffective for hunting? Not at all. A rough guide is:

| Kinetic Energy | Hunting Usage |
|-----------------------|---|
| < 25 ft. lbs. | Small game |
| 25 - 41 ft. lbs. | Medium Game (deer, antelope, etc.) |
| 42 - 65 ft. lbs. | Large Game (elk, black bear, wild boar, etc.) |
| > 66 ft. lbs. | Toughest Game (cape buffalo, grizzly, etc.) |

The spear, with 32 ft. lbs. of kinetic energy, would still be more than adequate for bringing down medium game, and a well-placed throw would work on larger game. The light dart, at 84-ft. lbs., would be more than adequate for bringing down even the toughest game.

CONCLUSION:

An atlatl and dart, in the hands of an expert, is a very powerful weapon. It has more impact force (momentum) than nearly all handguns, and more than some rifles. In terms of kinetic energy, it is weaker than all modern firearms, but is still capable of bringing down the largest game. Is it as powerful as a gun? No. But it is powerful enough to do the job it was designed for. Just how dead do you need your supper?

NOTE: These figures are only a general approximation, and don't take into account a wide variety of factors, which will affect both the force and the kinetic energy. The factors include effective range, target distance, velocity at impact, projectile type and makeup (size, shape, and material of spear, dart, and arrow points), drag and/or wind resistance, spin, and others. A dart may have almost as much kinetic energy as a .22 handgun, but only for about 20 yards. After that, the dart slows rapidly, losing most of its kinetic energy. Trying to account for every factor would complicate things beyond all comprehension, so please keep in mind that we didn't.

Bibliography

The firearm ballistics information is from the following website:
<http://medstat.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNBLST.html>
 The kinetic energy/hunting usage table is from an article entitled "Arrow Penetration - Much Ado About Nothing?" by Dr. Mark Timney, and was found on the following website:
http://www.bowsite.com/bowsite/features/practical_bowhunter/penetration/
 Bits of this information were found in other locations as well, but this summed it up best.



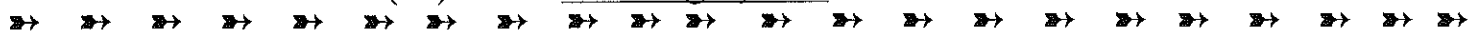
**YEAR 2002 OFFICIAL LIST OF ATLATL EVENTS
 THE WORLD ATLATL ASSOCIATION**

- October 4, 5 Atlatl contests at Luling, LA. ISAC only Lloyd Pine atlatlp@earthlink.net
- October 4, full day of throwing plus ISAC John Polk (985) 785-2281
- October 4, 5, 6 Flintknapping Rendezvous & Atlatl Competition, Indian Springs Ranch, Wrightwood, CA, ISACs all three days, 24 target "California Hunter Round" on Saturday Tom Mills PaleoAleo@aol.com (626) 794-9158.
- October 5, 6 ISAC, Bougon, France Christian Lepers christian.lepers@swde.be
- October 12 Holiday Park Atlatl Contest & Demos Local Contest and ISAC, Indianapolis, IN Don Fisher (317) 475-9770 atlatlguy@yahoo.com
- October 12, 13 Fallow Hollow Throw & ISAC, Fallow Hollow Deer Farm, Williams Rd., Candor, New York Bob Berg (607) 659-5967 courier@pronetisp.net Jack Rowe (570) 888-8258 fieldwalker@stny.rr.com
- October 11,12, 13 Hunter's Challenge, ISAC & Accuracy Throws. ISAC both days, at Riddle's 1417 Felland, Stoughton, WI Walter Riddle (608) 873-6262 wriddle@chorus.net
- October 12, 13 European Atlatl Contest plus ISACs Both days in Argenton-sur-Creuse, France Emmanuel Demoulian Emmanuel.Demoulian@wanadoo.fr
- October 15 Ann Arbor Indoor Atlatl League target Range at 7 pm with PRACTICE ISAC to follow. Jim Gilligan (810) 231-2314 primitive1@chartermi.net
- October 26 All Hallow's Eve Atlatl Contest & ISAC Charlie & Susie's, 14560 W. 58th Pl Arvada, CO Susie Brown (303) 421-0035 ssazzi@earthlink.net.
- October 26 Rural Ohio Appalachia Revisited (ROAR) Local contest & ISAC at Lake Hope Zaleski State Forest near Zaleski, OH Steve Barnett (740) 698-6553, barnz@juno.com
- October 27 Annual Wisconsin State Atlatl Championship at 9 am, Monticello High School Monticello, WI in connection with the Badger State Archaeological Show. Walter Riddle (608) 873-6262 wriddle@chorus.net
- November 2, 3 Icicle Shoot & ISACs, Tioga Park, River Road, Nichols, NY Bob Berg (607) 659-5967 courier@pronetisp.net Jack Rowe (570) 888-8258 fieldwalker@stny.rr.com
- November 2, 3 ISAC, Berck-sur-Mer, France Christian Lepers christian.lepers@swde.be
- November 9 Pueblo Grande Museum, 4619 E. Washington, Phoenix, AZ Field Round & ISAC Albert Abril aabril@home.com (602) 265-0177 or Bob Sizemore (520) 466-6104 bobandcarolathome@yahoo.com
- November 9, 10 Hunter's Challenge, ISAC & Accuracy Throw, ISAC both days at Riddle's 1417 Felland, Stoughton, WI Walter Riddle (608) 873-6262 wriddle@chorus.net
- November 19 Ann Arbor Indoor Atlatl League target Range at 7 pm with PRACTICE ISAC to follow. Jim Gilligan (810) 231-2314 primitive1@chartermi.net
- November 29 Turkey Toss and Last Gasp ISAC at Brighton Recreation Area at 10 am Day of novelty throws plus an ISAC. Kylie (Rabbit Stick) tournaments also!
 Jim Gilligan (810) 231-2314 primitive1@chartermi.net

YEAR 2003 ATLATL CONTESTS:

- February 21, 22 "Wintercount", ISAC and Field Round, ISAC And Field Round. ISAC on Friday after Noon. ISAC & Field Round Saturday. Location: near Maricopa, AZ, about 50 miles South of Phoenix, AZ Albert Abril aabril@home.com -(620) 265-0177 or Bob Sizemore (520) 466-6104 bobandcarolathome@yahoo.com
- February 28 - Mardi Gras Contest, ISAC Only. Baton Rouge, LA Contact: Lloyd Pine, atlatlp@earthlink.net
- March 1 & 2 - Local Contests and ISAC both days. Baton Rouge, LA Contact: Lloyd Pine, atlatlp@earthlink.net or (225) 265-5785

- March 8 Pueblo Grande Museum, 4619 E. Washington St., Phoenix, AZ, Field Round and ISAC Bob Sizemore (520) 466-61
- March 28, 29, 30 - 13th Annual Atlatl Gathering, Valley of Fire State Park, Overton, NV. ISAC Friday afternoon, Saturday, Sunday morning, WAA Target Round, American Field Round, Potluck dinner, Campfires. Contact: Leni Clubb waaleni@earthlink.net
- March 28, 29, 30 V Bar-V Ranch Rock Art Site, ISAC only All three days. 3 miles East of I-17 at exit 298 near Sedona, AZ Bob Sizemore (520) 466-6104
- April 18, 19, 20 Earthday Gathering & Mastodon Open ISAC all three days, EMC Club, Waverly N. Y. Jack Rowe (570) 888-5258, fieldwalker@stny.rr.com
- May 23, 24, 25,26 **Sixteenth Annual Meeting of the World Atlatl Association** in connection with The Primitive Archery Rendezvous and The Michigan Atlatl Marathon, Wilder Creek, Marshall, MI Leni Clubb waaleni@earthlink.net or Jim Gilligan primitivel@chartermi.net
- June 6, 7, 8 Eighth Annual Atlatl Competition, Fremont Indian State Park, Sevier, UT
Atlatl contest on Five Fingers Ridge, ISAC and American Field Round. ISAC 3 days in new Campground area. Park staff - (435) 527-4631
- June 6, 7, 8 Atlatls-In-Action, ISAC all three days EMC Club, Waverly, NY
Brandon Anderson (607)565-7901 or Jack Rowe (570) 888-5258 fieldwalker@stny.rr.com
- June 21, 22 6th Annual Meadowcroft Atlatl Event, Avella, PA ISAC's both days along with local contests.
Margie Takoch margieandfrank@hotmail.com
- August 8, 9, 10 Second Annual Persied Primitive Arts Weekend, Local Atlatl Contests & ISACs All three days. Start 5 pm Friday w/Torchlit ISAC, Camp Gross, Cassadaaga, NY
Ben Brauchler (716) 679-7145 ben@netsync.net
- September 12, 13, 14 Tyoga Shoot-Out, ISAC all three days. EMC Club, Waverly, NY
Jack Rowe (570) 888-5258 fieldwalker@stny.rr.com



A sneak preview of what's coming next issue:

Atlatl Elbow: Anatomy and Archaeology

By John Whittaker 9/02

At the end of last atlatl season I went to my doctor J.R. Paulson with stomach problems, but thought I might as well tell him about my elbow while I was there. I described the symptoms: "the outside of the elbow and the tendons on the outside and back of the lower right arm are really sore" and he poked it a bit and said "oh yes, tennis elbow." "Actually," I said, "it's from throwing spears," and I explained. That caught his interest, and he flexed my arm enthusiastically. I winced, but he was pleased: "OK, we can name a new medical syndrome: 'spear thrower elbow'." With regret, I told him it was too late, for "atlatl elbow" had already been diagnosed in prehistoric skeletons. J.R. didn't think I would have any damage that would show on an x-ray, so he dashed my dream of being the first archaeologist to experimentally replicate and document injuries to his own skeleton. But when J.R. asked for more archaeological details and wanted me to get precise about the anatomy, I realized I needed to do some research, so here it is.

Where does it Hurt?: Anatomy of "Atlatl Elbow"

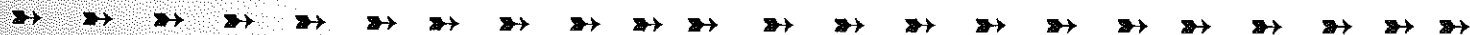
Human anatomy, in books by both doctors and physical anthropologists, is a lost world where fragments of ancient Greek and Latin still wander, apparently used as a code to keep common folk from intruding on the authority of science. Actually, the scientists are trying for unambiguously precise location and description of body parts, but the jargon requires some translation - those who don't need it can skip the bracketed comments. Chuck Hilton, a physical anthropologist, helped lead me through the maze and otherwise improved this discussion.

The elbow, shoulder, and wrist joints are all involved in throwing. Most atlatl complaints I hear are about elbows, and osteologists have focused on elbows in prehistoric populations, so I will focus on "atlatl elbow," but discuss shoulders as well. The wrist is even more complex, and seems to cause less grief, so I won't consider it here, but we should not forget that it is part of the throwing equipment.

Including: The Elbow; The Shoulder; Sore Bones: "Atlatl Elbow" in Prehistory;



"Wine makes daily living easier, less hurried, with fewer tensions and more tolerance."
Benjamin Franklin





ON TARGET
by Leni Clubb

Some one recently inquired on one of the community zero sites, about how to know when their membership to WAA had expired. It is easy – just look at the numbers to the right of your name on the newsletter address label. There is the month and year of the expiration. Also, if you are at least three months past the date, I will put a “Dues are Due” notice as an insert in the current newsletter.

You may not realize that as a member of WAA, you may request copies of the minutes of the Board of Directors’ meetings as well as minutes of the Annual Membership meetings. Also available are copies of the WAA By-laws. The minutes will keep you informed about the issues that the Board discusses at these meetings and the decisions that are made. Get to know what goes on at these meetings and realize that WAA is constantly working to improve our organization. Whatever is done in these meetings is “For the Good of the Order”, as the saying goes. If you are interested, please drop me an e-mail, a note,(at the address below) or a phone call and I will send you copies of whatever you wish to have.

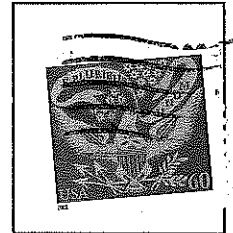
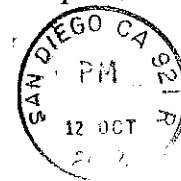
Due to a complaint made to the Board at the recent Annual Meeting in June, your Board is discussing the standardization of the requirements for the Grand Champion Award which is available to organizers, free of charge. The discussion involves whether to have standards of distance to target, number of darts to be thrown by the three contestants - Man, Woman, Youth in a final Throw-off for the Award after the weekend contests have been held and the over-all First Place winners have been decided upon. Since 1994, when the Award was first offered, organizers have been able to arrange for the throw-off in any manner that they wish. However, after the complaint, the Board feels it should discuss the matter to see if standard requirements are feasible. If you have any thoughts on the matter, don't hesitate to contact me at my e-mail address or by a note to our official address.

NEW E-MAIL:
waaleni@earthlink.net

Membership in the World Atlatl Association is \$15.00 per year; family membership is \$20.00.

Send all inquiries and dues to WAA Secretary:

Leni Clubb
P. O. Box 56
Ocotillo, CA 92259 USA



JOHN WHITTAKER (9/02)
DEPT OF ANTHRO, GRINNELL COL.
P.O. BOX 805
GRINNELL, IA 50112-0806



World Atlatl Association Web Site:
www.worldatlatl.org

