

The ATLATL

"Too long have I hunted mammoth alone!"

Rich McWhorter

July 1999

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BILL TATE, EDITOR

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12
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STONE ATLATL FINGER LOOPS

By Wayne Brian

At the recent Arizona Archaeology Exposition, I met with archaeologist, Allen Denoyer. He told me of finding a stone crescent in a site he was working on in southern Arizona, the first such find in the United States. Many of these crescents are in museums and private collections, but not apparently associated with atlatls. Until recent times, these were thought to be some form of ornament. Then, not long ago, while visiting The British Museum, an American archaeologist saw a Mexican atlatl with shell crescents hafted as finger-loops.

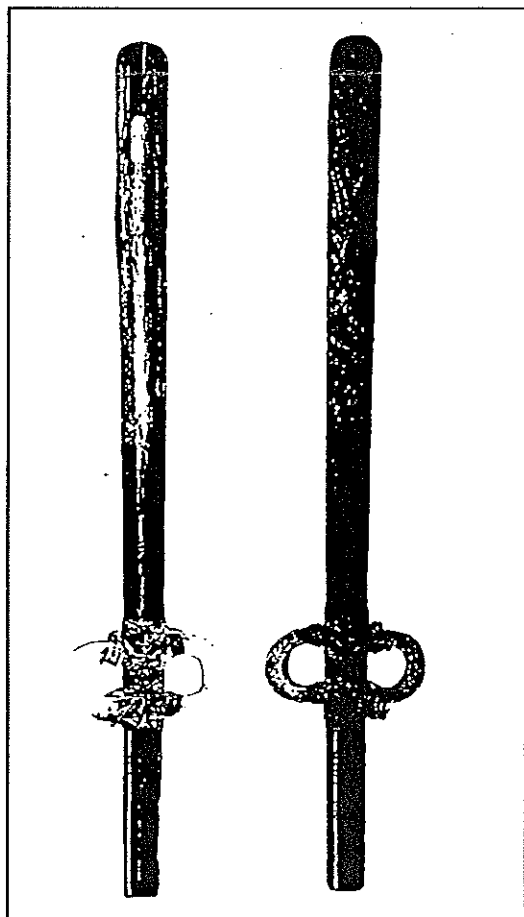


Fig. 1. Mexican atlatl with shell finger-loops in The British Museum.



Fig. 2. Detail view of shell finger-loops on Mexican atlatl in The British Museum.

Denoyer's crescent is carved from green muscovite, as are many from the Senora, Mexico area. Others are made of red argelite, a mineral found in the Tonto Basin in central Arizona. These crescents are said to be one of the rarest artifacts in this part of the world.

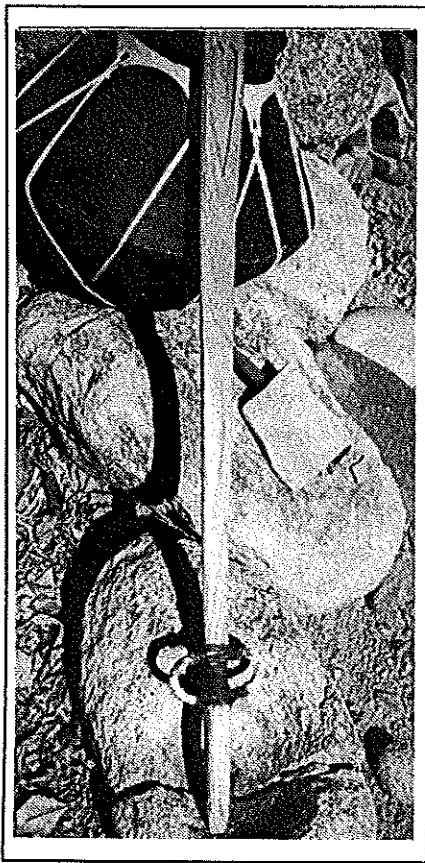


Fig. 3. Reproduction atlatl with stone finger-loops.

I made a reproduction atlatl using similar stone finger-loops employing hand twisted cordage to attach them. The stone I used is a tan material with brown inclusions found in southern Arizona. To me, this atlatl looks more like the common petroglyph depictions than any other form. For more information, contact: Wayne Brian, 824 W. Kiva Av., Mesa, AZ 85210.

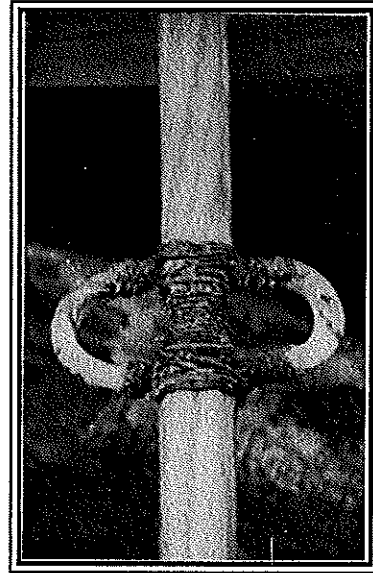


Fig. 4. Closeup of my reproduction atlatl showing finger -loops and hand twisted cordage.

Paleolithic Passion Grips Ligonier Man

Submitted by Elizabeth English

The following report from the Sep. 14, 1998 *Pittsburgh Tribune-Review* written by Jeff Domenick, was sent to me via e-mail by a friend. I thought members might be interested in this description of Pennsylvania's most interesting atlatlist.

With the state championship in his sport - no, make that passion - only days away, Chuck Butorajac's accuracy is failing him. He winces slightly when he hurls a spear thrown with a short stick. Despite the brace on his arm, the pain causes Butorajac to miss the paper-plate target 20 yards distant. "Atlatl elbow, that's what we call it," says Butorajac. "Just like tennis elbow. Too many throws and it hurts like the dickens."

Chuck Butorajac, 56, is the region's No. 1 promoter of the atlatl, a stone age weapon that was an improvement on the hand-thrown spear, but still pre-dated the bow and arrow.

...Butorajac isn't sure why he's so taken by the atlatl. Maybe it's because the device certainly isn't in the mainstream, much like Butorajac himself. The Ligonier man sports only half a beard: The left side of his face holds a thick, 2-foot gray beard; the right is clean-shaven.

"I had a beard for years and years, and I'd thought about shaving half of it off," Butorajac said. "It seemed like a good idea so I did it. It sure does draw a lot of comments."

But he is no nut, just a character. He's intelligent, has read more than a few books and is quite conversant on historical subjects. He's a self-taught artist by trade, working with stone, metal and wood. Mostly he makes jewelry and walking sticks.

Butorajac lives a quiet, riparian life in a small, decidedly rustic cabin along the bank of the Loyahanna Creek just east of Ligonier. His taste in decorating leans toward late Paleolithic. The walls are lined with animal skulls and his artwork, including his "Conan the Barbarian suit," which uses a giant snapping turtle for body armor. No dogs or cats; just tow birds, two snakes and an alligator.

A native of West Mifflin, Butorajac grew up enjoying the outdoors. His favorite pastimes were hiking in the woods, hunting and fishing. He moved to Ligonier in the 1970s to be close to nature.

The atlatl appeals to many facets of Butorajac's personality. It's historical, used for hunting, and he can make them himself using his woodworking skills.

He first learned of the device in 1994 when he saw an article in *Field & Stream* about hunting wild boar with atlatls in Georgia. The piece listed several people who made them so he bought one and a couple of spears. He started practicing and absolutely loved it. He won the West Virginia championship in 1995 and a number of other competitions since.

Butorajac has become "Mr. Atlatl" in western Pennsylvania. His license plate reads "Atlatl 1." The bumper sticker on his faded red Plymouth Horizon says, "Ask to see my

A Remarkable ISAC by The Cookie Maker

atlatl." If someone's seriously interested and lives within 60 miles of Ligonier, he'll drop by for a demonstration.

...Butorajac has turned atlatl into a true cottage industry, manufacturing them in his cabin. Atlatls can be made from any flexible hardwood, including ash, hickory, and maple. For his competition atlatl, Butorajac uses ash coated with deer sinew and hide glue to give the shaft more snap. He also custom-designed a grip by making a mold of his hand and using crushed walnuts and epoxy.

He makes his own spears. The shafts are rivercane, a member of the bamboo family found in swampy land throughout southeastern United States. The 6-foot shafts are heated to straighten them and turkey feathers are attached for guidance. The tips are made of crushed walnuts and epoxy for target throwing, while hunters use tips made of flint, ivory or deer horn.

...As part of his effort to promote the atlatl, Butorajac has two goals. Currently, there are only a handful of states in which atlatl hunting is legal. ...Butorajac has contacted the Pennsylvania Game Commission, which told him if he can get 500 people interested in hunting deer with an atlatl, it'll consider a petition to legalize it under the archery program. "Think of the publicity; the first deer in almost 2000 years to be killed with an atlatl in Pennsylvania," he said wistfully. Once more people take up the sport, Butorajac has visions of the atlatl making it to the big time. "You watch, some day it's going to be in the Olympics," he said.

The Aurora Annual Spear Sling Fling Thing July 9 - 10th by Bill Tate

This year's Spear Sling Fling Thing will again be held at Delaney Farm, site of the world's longest distance atlatl throw. The farm is a property of The City of Aurora, Colorado, and is located at 170 S. Chambers Road. Plans call for a 2:00 p.m. Friday afternoon ISAC to be conducted, and a day of competitions and demonstrations for the public on Saturday. Saturday, July 10th will also have an ISAC tournament along with scheduled American Field Round competitions for children, youth, women, and men, to round out the day's activities.

This is a call for all WAA members to attend and assist in passing on our knowledge of the atlatl to the public. WAA President Charlie Brown will be making up targets for the event. We need people to teach interested individuals, score the competitions, and staff a Q&A station.

Following Saturday's events, all participants are invited to your Editors home for drinks and dinner. For additional instructions or information, contact Bill Tate, (303) 755-5591 or atlatl@mho.net

Save the whales!
Collect the whole set.

It was a dark and stormy night... Oops, wrong story! It was a beautiful spring day, Sunday May 16th in Candor, NY. The flowers were blooming everywhere you looked. Of course, we were next to a nursery, Iron Kettle Farms. There were a number of atlatlists ready to do battle with the target - you know, the one with the outside 6 ring, a black 10 ring and a small X in the center!

At Target No. 1, "The Iceman" was up against "The Burntfoot." The first throws were evenly matched - 9s and 10s each. Then it happened. "The Burntfoot" wavered and threw it away. But wait, no! "The Iceman" not cometh! They were neck and neck again. The encounter concluded with a 79XXX for "The Burntfoot," nudged out by an 83X by the Iceman.

But unbeknownst to them, on Target No. 2, the "Former Halfbeard," threw a brutal 84X. However, it wasn't over yet. Up next on Target No. 1 was "The Medicine Man" against "The Shakespeare." Albeit "The Medicine Man" tried to put a spell on "The Shakespeare," as "The Medicine Man" was seen to do before, but, without his necklace, he had no power that day. Whereas, "The Shakespeare" was all powerful. With a resounding 90, he conquered the competition.

There were others who threw new personal bests that day. Was it the magic of New York, or the supernatural power of that rainbow ring around the sun?

"There are more things in Heaven and Earth,
Horatio, than are dreamt of in your philosophy."

William Shakespeare

The cast of Characters:

The Iceman	Gary Fogelman
The Burntfoot	Terry Keefer
The Former Halfbeard	Chuck Butorajac
The Medicine Man	Chris Pappas
The Shakespeare	Denny Bard
The Cookie Maker -	Margie Takoch

(Ed. Comment: Can I read into this that Chuck Butorajac no longer is sporting half a beard???)

Beautiful Vermont Beckons Sep. 18th Bill Tate

All of you easterners should consider attending the Chimney Point State Historic Site's Fourth Annual Northeastern Open Atlatl Championship, September 18th between 1030 a.m. and 4:30 p.m.

Chimney Point State Historic Site is located at the junction of Routes 17 and 125 by Champlain Bridge at Addison, VT. This is along Lake Champlain's eastern shore in west-central Vermont, and should prove to be one of the most scenic of the eastern contests.

Planned for this Saturday event are contests for accuracy, distance, and weapon style in addition to the International Standard Accuracy Competition, ISAC. Also scheduled are workshops for all ages (call to preregister), demonstrations of early Native American skills and crafts, and a Kid's Tent. For more information contact Audrey Porsche or Angela Bennett Althelm at (802) 759-2412.

LETTERS LETTERS LETTERS LETTERS

...Enclosed please find \$10 for dues to joining the World Atlatl Association. Stu Spaulding, Belmont, Arizona gave me one of your newsletters from which I obtained your address. As an instructor of Archaeology at Coconino Community College, Flagstaff, Arizona, I introduce students to the history and use of the atlatl and believe that your newsletter will prove beneficial to the class.

Although I have to meet and confer with the Arizona Game and fish Department to confirm my intentions, I hope to promote, through extensive training, the first Arizona Atlatl elk hunt sometime in the near future. I'll keep you posted.

Sincerely, Jerry Bacon

Hello,

I find the atlatl very interesting. I have never practiced it, but when I was young my father taught me a similar technique using not an atlatl, but a piece of rope. After having seen atlatls in books about the prehistoric era, I tried to make one, but I never could throw anything with it. Could you explain to me how to use it or where I may find how to use it (and optionally, how to make one?). Thanks for your response. Victor A. (from France)

...My name is Ron and I'm a survival education student out at Eastern Washington University, in Cheney, Washington. I'm conducting a research project on the atlatl and I have only a few hours to work on, construct, improvise, and write about the atlatl. So hopefully you're at your personal computer now and able to help me. Basically I just need to find out a way to construct an atlatl with whatever I can find from my garage and backyard... I feel that this will most likely not be achievable because I have a limited amount of tools at my disposal, please prove me wrong. I have a hatchet, pocketknife, some boards, duct tape, hammer, nails, antenna rod, and backyard branches. If there is any info on some shortcuts you can send me within the next-half hour upon receipt of this message it would be greatly appreciated. Thanks for your time and sorry for the rush job message.

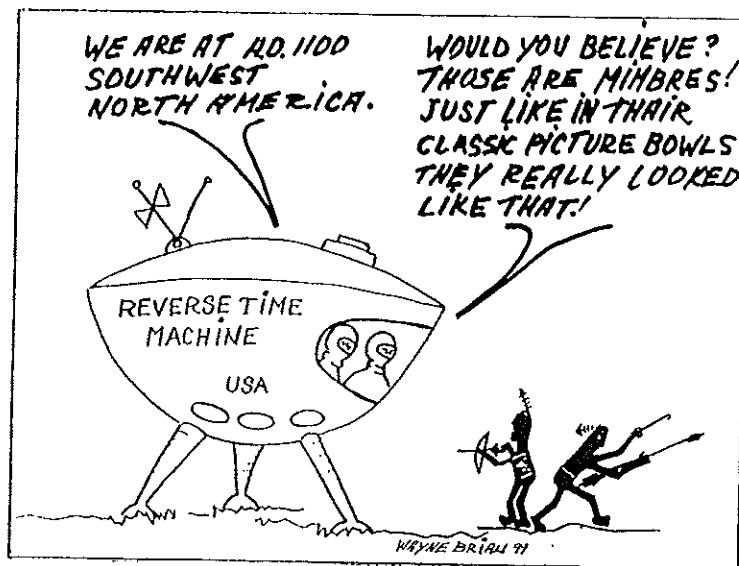
p.s.. I have to leave this PC soon so if you can't or did not respond to this message within a half-hour; please disregard. Once again thank you. Ron
(Ed. comment: Sorry, I couldn't get back to Ron that day, much less within a half-hour.)

Hello Bill!

Thanks for the quick response! (See, sometimes I am prompt. Ed.) My next archery session begins this Tuesday. I will contact you again soon with regards to dates for you to come. I want to thank you for your

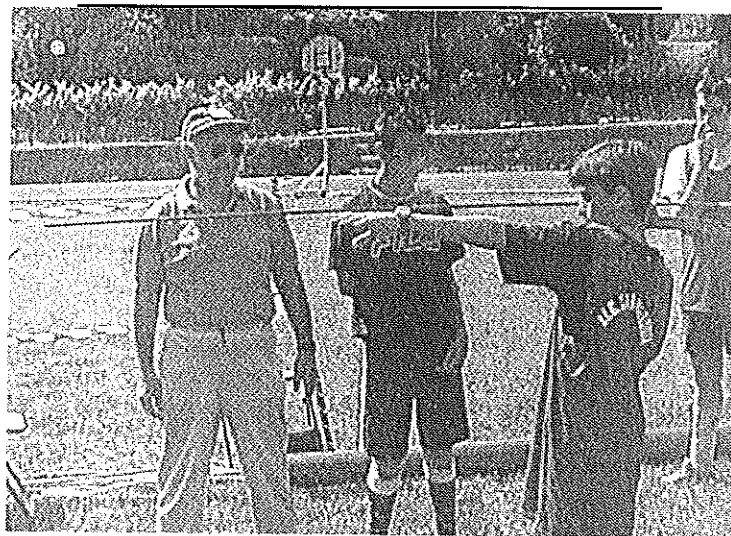
willingness to share your historic sport. I find that the kids that come out for archery are quite enthusiastic and I'm sure that they'll love it! Looking forward to meeting you. Sincerely, David Talbot

p.s. You might be interested to know that I had saved an old newspaper article from a year or two ago, and that's how I learned about you and then from that I went to the web....



News from Europe

From Italy, comes news from Bruno Morucci, that in May, his organization shared their knowledge of spear throwing at Sports School Day in Rome. Here, members demonstrated at the Caracalla Emperor Stadium, near the Colosseum and Circus Massimo in the ancient section of the City.



Atlatl instructions in the shadow of ancient Rome.

Belgium's Pascal Chauvaux, in an e-mail to WAA President Charlie Brown, wrote that he has injured his right shoulder and cannot throw a dart without pain. He apparently hurt the shoulder in a stone throwing contest with his sons at the beach. This is a disaster for Pascal because many of the important European contests will be held in the next few weeks.

More recently, Pascal wrote that an atlatl contest was held in early June in Solutre, the type site for the archaeological Solutrean culture. He stated that, "It was great (to think that we were treading on the same ground as the famous horse hunters). And maybe under the same rain



On Target

by Leni Clubb

For the first time in its 12 year history, The World Atlatl Association will hold its Annual Meeting east of the Mighty Mississippi! (Well, a little bit east, anyway). This will give many of our WAA members a chance to "meet and compete" with throwers we know only from the newsletters. We all are looking forward to getting to know as many of you as can attend. So put September 11th and 12th on your calendar and come to the biggest-ever Annual Meeting. You will be glad that you did. We can scrutinize each other's throwing style, critique all atlatl/dart equipment, swap/trade stuff, tell lies about our ISAC scores, etc. etc. Come join us for a great time and participate in the business of your organization. See you in September at Cahokia!

I don't get many newsletters returned, but it is important to keep us advised of any change of address so you won't miss any of the newsletters. The Post Office has Change of Address forms that are easy to use, or you can drop me a note on a postcard.

Would you like to own a WAA wrist watch—or give one as a gift to someone? We have only three (3) remaining of our classic Quartz model, with a round gold metal case and black leather band. You can purchase them for \$15.00, plus \$3.00 Priority Mail postage. This is not a money-maker, but the actual cost to WAA.

Check your expiration date in the upper right hand corner of the mailing label. Don't let your membership lapse...you might miss something important in one of *The Atlatl* issues...like the article you really needed, or a date in the calendar for a contest you wanted to attend.

For the past few years, Hallie and I have left Ocotillo in early June and not returned until Late August or September, all the while traveling to various atlatl contests in a number of far-flung states, logging 10,000-12,000 miles a year. This year we have altered our plans.

We have a new 'home away from home' in San Diego that will serve as our home base this summer. We will attend contests at Fremont Indian State Park in Utah, the Mammoth Hunt in Montana, and the Twelfth Annual Meeting of the WAA (and contests) at Cahokia in Illinois. The remainder of the time we will be at home at: Hyde Park Villas, 6930 Hyde Park Drive, #212, San Diego, CA 92119. Our telephone number there is (619) 462-4638, and we have an answering machine. Our permanent address will remain in Ocotillo, where we will return each Wednesday to pick up mail, etc. If you need to call me, our number there is (619) 462-4638. (It was 105 degrees at 1:30 p.m. the day we left Ocotillo!!! And only 72 when we got to our home on the hill in San Diego, with a nice cool breeze.) We will return to the desert for the winter. Our e-mail address remains the same: leniwaa@inreach.com

Star Wars, the Phantom Menace

by Leni Clubb

The Atlatl has made Star Wars!!! One of the characters - "Jar Jar Binks" riding on the creature "Kaadu" is holding what they are calling an ATLATL...that is what it says on the box that holds the toy. This atlatl is club-like with a ball on the top in a recessed cup. I don't know how the so-called atlatl works when Jar Jar gets into action. I didn't ask the person who had just bought the boxed toy to take it out of the box and show me what happens (it was one of our Ocotillo members - Maice Apodaca - she bought it because of the word atlatl on the box) but if you go to see Star Wars, let me know.

Eleventh Annual Montana Mammoth Hunt

by Jim Ray

The Montana Mammoth Hunt will be held at a new location this year. Sponsored by the Museum of the Rockies, the contest site is west of I-15 about four miles south of Helena, where motels, gas stations, restaurants, and an airport are nearby. Primitive camping space will be available at the contest site.

On Saturday, July 17 there will be a local atlatl contest at 10:00 a.m. Following the contest and awards presentation, there will be a raffle of several prizes, with part of the proceeds going to the French museum lighting fund. At 7:00 p.m., at the local high school, Dr. Les Davis of the Museum of the Rockies will present a slide show on an archaeological topic.

On Sunday, July 18, there will be a European style atlatl contest at 10:00 a.m., using actual European targets this year donated by Pascal Chauvaux of Belgium.

Anyone needing directions to the Montana Mammoth Hunt contest site can call Troy Helmick at (406) 266-3398 or Jim Ray at (406) 736-5274. Maps are available.

Valley of Fire State Park

by Leni Clubb

Valley of Fire State Park, Overton, Nevada - April 16-18, 1999. The weather was perfect - sunny with blue, blue skies, not too warm. Here we had great fellowship and friendly competition with our WAA members from California, Colorado, Nevada, Montana, Arizona, Utah, Alaska, Indiana, Missouri, North Dakota, New Mexico, and Ohio. There were 50 contestants - many of whom entered all four contests--68 throws in three days. Saturday evening, the potluck dinner was a huge success with mounds of good food.

Jim Ray, from Montana, who is the Master of the European-style contest arrangements, planned a surprise for the winners of this Saturday afternoon contest, beautiful handmade awards that 1st to 3rd place winners could choose from. Ray Madden of Missouri, with a score of 42.7 had first pick and chose the gorgeous large pine needle basket made by Tim Boucher of Colorado. Jim Ray

several campers to stay over another day beyond those scheduled. In addition to the European-style contest, there was the annual atlantl competition on April 17 and two ISAC contests on April 16 and 18.

There were 50 contestants in the annual atlantl competition. The winners are listed below:

10 and Under - Awards presented by the WAA

- 1st Place - Sierra Waters, Utah
- 2nd Place - Derek Helmick, California
- 3rd Place - Tiffany Weimer, Utah

14 and Under - Awards presented by Valley of Fire State Park

- 1st Place - Tyler Helmick, California
- 2nd Place - Tyrell Bagler, Utah
- 3rd Place - Tanner Weimer, Utah

Women

- 1st Place - Toni Roberts, Ohio
- 2nd Place - Susie Brown, Colorado
- 3rd Place - Anita Lukes, Indiana

Men

- 1st Place - Robert Hamilton, Utah
- 2nd Place - Don Roberts, Ohio
- 3rd Place - Charlie Brown, Colorado



took second place in the Men's Division, followed by Jeff McGill of Utah with third place. In the Women's Division, Susie Brown of Colorado took 1st place, followed by Anita Lukes of Indiana in second, and Toni Roberts of Ohio in third place. In the Youth Division, Derek Helmick and Tyler Helmick, both of California, took 1st and 2nd places, respectively. (A couple of chips off the "old" grandfather block, Troy Helmick). Awards were donated by Dean Pritchard, Jim Ray, Tim Boucher, Bob Patton, and Charlie Brown.

It was so beautiful in Valley of Fire that everyone hated to leave and scatter to places where the snow was falling. Gary Rimby, Park Supervisor, generously allowed

Grand Champion - Awards presented by the WAA

- Primitive - Robert Hamilton, Utah
- Modern - Toni Roberts, Ohio

There were 24 participants in the ISAC contest held on April 16. The top throwers in the Men's and Women's divisions are listed below.

Charlie Brown, Colorado	76
Ray Madden, Missouri	76
Robert Hamilton, Utah	70

Anita Lukes, Indiana	41
Susie Brown, Colorado	37
Jo Guill, Arizona	27

Top throwers for the April 18th ISAC were:

Robert Hamilton, Utah	83
Charlie Brown, Colorado	79 X
Don Roberts, Ohio	72

Susie Brown, Colorado	69 X
Toni Roberts, Ohio	42

Annual Idaho State Open Atlatl Competition

by Dean Pritchard

The annual Idaho Open Atlatl competition was held at Celebration Park, May 1st and the weather almost cooperated. The contest was held in conjunction with "Idaho Archaeology Week" and was sponsored by Canyon County Parks & Recreation.

The course was located next to the mighty Snake River in the "Birds of Prey National Conservation Area" in southwestern Idaho, and the view was impressive. A Paleoindian campsite is encompassed by the park, and it is common to see stone chips and other debitage while retrieving your darts. Other events taking place at the same time as the contest were Primitive Technology demonstrations and guided field trips to the nearby petroglyph sites.

The main atl atl competition event consists of a 15 meter accuracy throw involving a total cast of 12 darts. Three darts are thrown in succession, in turn, for a total of four rounds. This contest is designed as a fun event for the purpose of introducing the novice to the atl atl. The scorekeeper deletes the two lowest scoring throws from each participants score. Hence, the total score was gathered from the 10 best dart scores. The ISAC was held at another nearby location on the same day.

A total of 88 people competed in the main event and 31 people competed in the ISAC. The winners in the main event area as follows:

Men	1 st	Troy Helmick
	2 nd	Charlie Brown
	3 rd	Quinn Pritchard
Women	1 st	Tamara Cameron
	2 nd	Susie Brown
	3 rd	Judy Pritchard
Youth age 6-13	1 st	Justin French
	2 nd	Joel Herrett
	3 rd (tied)	Aric Gloverl
		Ben Mackrill
Kids 5 & under	1 st	A. J. Bilcak

Health is merely the slowest possible rate at which one can die.

Atl atl Tournament Turbotville, Pennsylvania

by Gary Fogelman

The Fogelmans hosted an atl atl tournament on May 1 in Turbotville, Pennsylvania. There were 21 contestants on hand. We had three shooting lanes set up. The first contest of the day was the ISAC, where we had three scores of note. Three throwers Denny Bard, 15-year-old Doug Majorsky, and Paul Marco all moved into the 80s. Each threw an impressive 81. Paul Marco's previous best was 64. He received a special award for making the highest jump in personal ISAC scores.

The Grand Champion Award was fought for over a 30-target modified European round. An ISAC target was used throughout, with one shot each from distances of 10, 15, 20, 25, and 30 meters, out and back, for a total of 10 throws per round. Three rounds made up the contest.

For the Women, 1st Place went to Sharon Keefer, 2nd Place to Toni Roberts, and 3rd to Tesha Keefer. JoAnne Fogelman rounded out the contestants to four.



Grand Champion winners, Don Roberts who placed 2nd, Gary Fogelman, 1st, and in 3rd place, Terry Keefer (trying to hide his ugly necklace).

Sixteen men were on hand. Third place in the Grand Champion went to Terry Keefer with 189 points, 2nd to Don Roberts with 209, and 1st went to Gary Fogelman, who went 28 for 30 and scored 223 points.

Also shooting were Don Gordon, Chuck Butorajac, Paul Glachl, Dona Klein, Scott Von Arsdale, Jack Rowe, Bal Berg, Chris Pappas, Frank Takoch, and Roger Klindt. We had a fine day and a fine group of people. Lest I forget, Terry Keefer ended up with the ugly necklace, given to the one who shoots the lowest ISAC among those who have previously registered a 70 or better!

If at first you do succeed,
try not to look too astonished.

If at first you don't succeed, destroy all evidence that you tried.

**The World Atlatl Association
Edge of Cedars State Park & Museum
Atlatl Contests**

Two atlatl contests were held on May 8 in Blanding, Utah. First, there was a European-style contest. Awards, presented by the Edge of Cedars State Park and Museum, went to local contestants only.

10 & Under

- 1st Jaime Laws, Blanding, Utah
- 2nd Talon Kartchner, Blanding, Utah
- 3rd Chailee Kartchner, Blanding, Utah

Youth - 11 to 16

- 1st Dalan Simmons, Page, Arizona
- 2nd Carl Kimmerle, Blanding, Utah

Women

- 3rd Debbie Laws, Blanding, Utah
- 1st Penny Richards, Moab, Utah
- 2nd Terrie Simmons, Page, Arizona
- 3rd Kellie Hume, Cortez, Colorado

Men

- 1st David Kimmerle, Blanding, Utah
- 2nd David Simmons, Page, Arizona
- 3rd Jeff Richards, Moab, Utah

After presentation of awards by Deborah Stevenson, Director of Education at Edge of Cedars Museum, winners were surprised by a second award. Winners in each category and place then chose a prize from a blanket of various items, donated by WAA members and the organization. Prizes included two darts, a painted shield, a hafted stone knife, books, and various other handcrafted items, as well as a WAA Family membership, and a WAA watch. WAA member Jim Ray of Montana made the ten targets used in the contest and solicited the donated awards.

As this was the first time the contest had been held in Blanding and most of the contestants were first time throwers, veteran WAA members who came from Colorado, Montana, California, and Utah to help conduct this event requested that their scores not be considered. In all, there were 27 contestants and numerous spectators present at the practice field of the San Juan High School under a cloudless sky in beautiful weather.

Best scores in the ISAC were: Men: Charlie Brown, 78 X; Jim Ray, 77; and Jeff McGill, 65 X. For Women: Susie Brown, 40; Leni Clubb, 16; and Amy Wolin, 13. Youth: Carl Kimmerle, 14, Jaime Laws, 9, and Dalan Simmons, 6.

The top scorers in the European-style competition were for men: Robert Hamilton, 31.31, Jeff McGill 29.77, Jim Ray, 22.6, Charlie Brown, 21.9. Best women's score went to Susie Brown with 6.93.

Bailey Boomerangs has moved

Ted Bailey of Bailey Boomerangs has moved its boomerang catalog and related web pages to a new web address: <http://www.flight-toys.com/> Or you can contact Ted at P.O. Box 6076, Ann Arbor, MI 48106, telephone (734)971-2970.

...Just a note of thanks to you and WAA leadership for providing the great 9th event at the Valley of Fire. I thoroughly enjoyed myself and learned quite a bit. I will attempt to attend as many WAA events in the West as my schedule allows, and I vow to practice more! Again, thank you and the club. Your most obedient servant,
Erik R. Batzloff (The No-Bear)

Introduction to Art

by "The Old Mammoth Hunter," Jim Ray

Recently, the WAA acquired a new member, whom I think is noteworthy enough to be introduced to the entire membership. I became acquainted with Art Kober several years ago, during the annual C.M. Russell Auction and Show of Western Art in Great Falls, Montana. The show runs for four days in March and features the top western artists in the U.S. Art's paintings immediately grabbed my attention then, and my interest has continued to this day!

Art's painted subjects include, but are not limited to, mountain men, fur trappers, Native Americans, soldiers, and animals. Also, a subject of special interest for him is Lewis and Clark and the "Corps of Discovery."

Being a former mountain man/buckskinner himself, he and I had common interests from the start. Now we have even more. In March of this year, I was able to persuade him to join the WAA and gave him a set of primitive river cane darts and an atlatl. During a brief break from the show, I showed him how to throw. Like a duck to water, he immediately had the arrows flying like a seasoned veteran (must have been my excellent instructions! Yeah, right!)

After seeing the European primitive artwork on cards sent to me by Pascal Chauvaux, Art immediately became interested in pursuing that genre for his artistic expression. His first such painting was a beautiful wooly mammoth (can you call a wooly mammoth beautiful?) This painting can now be seen at the home of "The Old Mammoth Hunter," along with other commissioned works by Art Kober.

Art researches his subjects well and makes sure all of the details are as correct as possible. I can speak from personal experience, when I say that Art Kober works tirelessly with preliminary sketches and layouts to get a subject correct prior to putting oil on canvas!

Art can be reached at Box 270428, Fort Collins, CO 80527 or <http://www.frii.net/~akoher>.

Editor's comment: This Fort Collins, Colorado artist, Art Kobert, has expressed an interest in doing a painting or two based on the atlatl. As he will be between shows July 9th and 10th he plans to attend the Aurora Spear Sling Fling Thing to learn more about the sport and observe the movement of throwers in action.

Static Flex Measurements for Better Darts

By Lloyd Pine

I make my darts from what we in Louisiana, call river cane. In the past, I had to make several darts for each one that really threw well. Making a set of matched darts was a formidable task. Last year I started using some static flex measurements to help me make better darts. The results were better than I had anticipated. I can now make matched sets of darts with very few culls, and I get a greater number of usable darts from my raw materials.

We all know that flexibility is probably the major factor in dart performance. I am enough of a scientist to know that a kinetic measurement of flexibility would be the best measurement, but this is not an easy thing to do. The static test is simple and doesn't ever need to be standardized in any way. I make the measurement on either a blank or finished dart by laying the dart on a bench or saw horse with exactly 1.00 meters hanging over the end. Since I reload shotgun shells, I use 25 lb. bags of lead shot to weight the dart so that all of the flex must take place in that 1.00 meter portion. I then hang a weight on the end and measure the distance that the dart bends toward the floor. My weight happens to be 570 grams (1.25 lbs.), and is made from a lead ingot suspended from a thin thrust washer slipped over the cane material. The weight should not be much heavier, or it will flex the dart so much that it will fall off the end. River cane does not have any spline, so it is not necessary to rotate the dart and make several measurements. Initially, I also made measurements with 80 and 60 cm. of overhang, however the 1.00 meter measurement is by far the most sensitive, so I now use it exclusively.

I started this project by measuring the darts that I had on hand at that time. The two darts that I liked best had static flexes of 24.5 and 21.0 cm. Darts that I considered too stiff had 16.0 and 19.0 cm. of static flex. One dart which was too limber had 31.5 cm. of static flex. I then made the eight darts shown in the table. I use a natural node in the cane for the butt end of my darts as it provides a strong place to carve the recess for the atlatl spur. All of the blanks had balance points between 41% and 45%. The darts were all made with a 15 cm. (6 in.) foreshaft constructed from ½ inch dowel, with a copper tip made from ½ inch copper tubing 3.8 cm. (1½ inches) long. Fletching was three turkey feathers all approximately 3 by ½ inches. The finished darts had balance points between 36% and 40%. Dart No. 3 was hit by another dart and destroyed almost immediately, so I did not get any data with it. The foreshaft and the front of the cane of dart No.

8 broke early in the testing, so it was rebuilt as No. 8a. Darts 1, 7 and 8a threw the best for me and I really could not decide which was best. I would favor one dart one day and another the next. Dart No. 2 was clearly too stiff.

Darts No. 4, 5, and 6 did not throw the same as the others and seemed, if anything, a little stiff. I decided that they were not flexing as they should because they were too light. There was just not enough mass ahead of the final meter of dart to impart the same flex as the other darts. I rebuilt them by adding more foreshaft to get the length closer to 200 cm. and more copper as needed to get the weight just over 100 gm. I believe that it is more important to match total weight than length. This rebuilding moved the balance points forward to about 35%. Darts 5a and 6a now threw as well as 1, 7, and 8a. Dart 4a was still a little too stiff. I now had 6 darts that all threw well for me and at my ability level, I could not detect any significant difference between them. I am not sure why Dart No. 7 threw so well as it was in the same weight range as Darts No. 4, 5, and 6. However, Dart No. 7 is significantly more flexible which may account for its good performance.

For me, a static flex between 23.0 and 26.5 makes a good dart. I could probably extend the range to slightly more flexible, but this boundary is not as clear as the too stiff side of the range. The static flex measure also lets me get more darts from my raw materials. I cut my cane about eight feet long, more or less. I can pick the portion of that length that gives me the right flex and length for my darts. For better uniformity, if the correct flex falls between nodes, I cut the cane at that point and plug the butt end with a short piece of dowel. If I cannot get a dart out of a piece of cane, I set it aside for someone else to use. Note that one does not need to use a particular weight or distance for the flex measurement. Use what you have on hand and find out what flex works best for you. Any darts you make will be much more uniform. If you are good enough to still find differences in performance, I envy you. However, even in this case you will still save some work and material.

FINISHED DARTS

No.	Flex cm.	Length cm.	Weight gm.
1	24.5	200	104.1
2	18.5	201	101.6
3	20.5	187	89.6
4	21.0	197	91.9
5	23.0	175	91.0
6	24.0	188	86.1
7	26.5	198	88.6
8	26.0	217	116.0

REBUILT DARTS

4a	21.0	202	105.8
5a	23.0	194	104.0
6a	24.0	202	100.9
8a	26.0	203	107.0

1999 INTERNATIONAL STANDARD ACCURACY COMPETITION

Results Received through June 12, 1999

Lloyd Pine

MEN

Score	Equip.	Name	From
92-2X	P	Ray Strischek	Ohio, USA
90	P	Gary Fogelman	Pennsylvania, USA
90	P	Denny Bard	Pennsylvania, USA
89	P	Pascal Chauvaux	Belgium
88-X	O	Terry Keefer	Pennsylvania, USA
87	P	Chuck Butorajac	Pennsylvania, USA
86-3X	P	Jean Speckens	Belgium
83	P	Robert Hamilton	Utah, USA
82	P	Laurent Bernat	France
81	O	Paul Marko	Pennsylvania, USA
80	O	Don Roberts	Ohio, USA
79-X	P	Charlie Brown	Colorado, USA
79	P	Ishmael Yahemdi	France
78	P	Alain Sellekaerts	Belgium
77	P	Jim Ray	Montana, USA
76	P	Ray Madden	Missouri, USA
76	O	George Bigelow	Kansas, USA
76	P	Chris Pappas	New York, USA
74-X	O	Frank Takoch	Ohio, USA
73	P	Mark Bracken	Georgia, USA
73	P	Paul Gleckl	Pennsylvania, USA
71	O	Jack Rowe	Pennsylvania, USA
70	P	Uli Weigel	Germany
70	O	Lloyd Pine	Louisiana, USA
70	P	Bernard Binelli	France

WOMEN

69-X	P	Susie Brown	Colorado, USA
61	P	Sharon Keefer	Pennsylvania, USA
52	O	Toni Roberts	Ohio, USA

YOUTH

81	O	Doug Majorsky, 15	Pennsylvania, USA
64-X	P	Bob Rowe, 14	Pennsylvania, USA
62	P	Thomas Chauvaux, 12	France
55	P	Paul Veigel, 13	Germany
51	P	Jehan Speckens, 13	Belgium
46	P	Tesha Keefer, 11	Pennsylvania, USA
43	P	Gael Speckens 13	Belgium
40	P	Massimo Cappellini, 14	Italy

WORLD'S LARGEST ATLATL EVENT?

Thirty-Seven Nations

by Leonard and Mary Riemersma

Archaeologists, scientists, and other individuals interested in rock art and similar studies assembled for the IRAC '99 International Rock Art Congress, in Ripon, Wisconsin, USA. The event was held at Ripon College from May 20th through 31st. The congress was sponsored by the following: International Federation of Rock Art Organization (IFRAO), American Rock Art Research

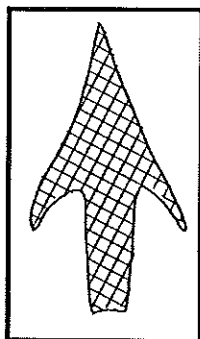
Association (ARARA), and Mid-America Geographic Foundation (MAGF). Thirty-seven nations, with over three hundred registrants were represented at the congress. They were given opportunities to attend many various lectures of various rock art sites throughout the world. Images of the atlatl form a prominent element in the ionic dating of rock art. Famous sites, such as Little Petroglyph Canyon in the Coso Range of California and the Jeffers Petroglyph site in southwestern Minnesota are thought to contain Archaic components dating to before 1000 B.C. because of the atlatl imagery.

On Thursday, May 27th, we were invited to demonstrate and show the nature of the atlatl and the physical behaviors associated with its use. There were over two hundred persons attending throughout the 1.5 hours, (which was expanded to 2.5 hours due to popularity) that was set aside for us. Our demonstration included a short talk on the basic principles of the atlatl and dart, along with a show of distance throws and safety information. We also had an area set up with four 4 ft by 4 ft targets at a distance of 30 meters. This area was staffed with six assistants who volunteered. We are very grateful for their help, not only at the congress but for attending our safety class a month prior to the event. They helped at the event by assisting participants to throw for distance and for accuracy at the targets, but mostly for fun, as many of the participants were using the atlatl for the very first time.



Mageded Khan from Saudi Arabia receiving instruction from Len Riemersma, Cesar Quiljada Lopas of Mexico looking on from behind. (Photo by Yoshio Hojima, Philadelphia, PA)

The demonstration gave everyone the opportunity for discussion about atlatl points, datelines, bannerstones, and other topics. Len was given a resin copy of a pro-



Actual size of point.

jectile point found in Spain by Sergio Ripoll Lopez. The point is believed to be 22,000 years old. It measures about 1 1/2 inches (3.5 mm) in length. Could this have been used on a compound dart for bows which were not known to have been invented yet??

There is another aspect to ponder in regard to size and shapes. Our research shows that:

At 5000 years B.P. points were 3-5 in. long.

At 3000 years B.P. points were 1-2 in. long.

At 2500 years B.P. points were 3-5 in. long.

At 2000 years B.P. points were 3-5 in. long.

Notice that at 3000 years B.P. points were much smaller, and this was also the time that bannerstones first appeared. Could this have been due to the use of a compound dart with smaller points and bannerstones? Any information about these questions and theories would be appreciated. Please contact: Len Riemersma, N2496 N. Maple Tree Road, Cascade, WI 53001, USA.

ATLATL EVENTS AROUND THE WORLD - 1999

- | | | |
|----------------|-------|--|
| June | 18-19 | Atlatl Contest and Flintknapping Event, Glimmer Glass State Park, Cooperstown, NY. Contact Bob Berg (607) 687-4064. |
| June | 18-20 | Fremont Indian State Park Annual Atlatl Contest and ISAC, Sat. the 19th, Sevier, UT. Contact Pete Weimer (435) 527-4631. |
| June | 26 | Michigan Outdoor Survival School (MOSS) Milkado, MI at 4:00 p.m. Stand alone ISAC. Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com or Jim Miller MOSS Director (517) 736-3487. |
| June | 27 | Meadowcroft, Avella PA, Includes ISAC and Demo. 1-5 p.m., Contact (740) 264-1755 or margieandfrank@hotmail.com |
| June | 26-27 | European Championships at Saulges France. Contact Pierre Matheus.* |
| June | 26-27 | World Atlatl Open, Fort Caspar, Museum, Casper, WY. Expect: American Field Round, Golf Round, ISAC and Hunting-type atlatl contests with craft fair and primitive skills demonstrations. Contact Ranger Rick Young at (307) 421-8462. |
| July | 3-4 | Atlatl Contest with ISAC & Flintknapping, 90 Main St. Candor, NY. Contact Bob Berg (607) 687-4064. |
| July | 3-4 | European Championship plus ISAC, Lago Della Montagna Spaccata (Broken Mountains Lake) Abruzzo National Park, Italy, Contact Bruno Morucci arca@fivenet.com , Or Pierre Matheus.* NOTE: This is a change from previously published dates. |
| July | 4 | Atlatl Demonstrations, Flint Knapping and other Primitive Skills Exhibitions plus local Atlatl Contest and ISAC at Candor, NY. Contact Bob Berg (607) 9065 or 1-800-836-4520. |
| July | 9-10 | Aurora Spear Sling Fling Thing, Aurora History Museum, Aurora, Colorado. Contact Bill Tate (303) 755-5591 or atlatl@mho.net . |
| July | 10-11 | Keefer Klan Atlatl Competition, Fannettsburg, Fort Loudon, PA. Contact Sharon Keefer (717) 349-2262 or tkeefer@evn.net |
| July | 11 | Chelsea Rod & Gun Club 3-D Shoot. (Field points only please) 8:00 a.m. to 4:00 p.m. Chelsea, MI. Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com |
| July | 17-18 | Montana Mammoth Hunt, Montana City, MT. Contact Troy Helmick (406) 266-3398, or Jim Ray (406) 736-5274. |
| July | 17-18 | European Championships at Mauvesin, France. Contact Pierre Matheus.* |
| July | 17 | Alder Acres Atlatl Tournament, Lorraine, NY. Contact Rodger Klindt (315) 639-6293 or mammothdoc@juno.com |
| July | 24-25 | French Creek Artifact Show and Atlatl Tournament, Saegerstown, PA. Local and ISACs. Contact Gary Fogelman (570) 437-3698 or John (814) 398-4814. |
| July | 24-25 | European Championships at Tarascon, France. Contact Pierre Matheus.* |
| July | 24-25 | Platte River Primitive Skills Rendezvous at Douglas, WY. Atlatl competitions with ISAC, plus primitive bow and arrow and other activities. Contact Michael O'Meagher (307) 358-0155 or doearth@coffey.com |
| July 31 - Aug. | 1 | Illinois Atlatl Association International Competition - Franklin Grove Summer Harvest Festival at Chaplin Creek Historic Village, Franklin Grove IL. Contact Don Asp (815) 734-6905. |
| July 31 - Aug. | 1 | European Championships at Le Mas d'Azil, France. Contact Pierre Matheus.* |
| Aug. | 1 | Chelsea Rod & Gun Club 3-D Shoot (Field Points only please) 8:00 a.m. to 4:00 p.m. at Chelsea, MI. Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com |
| Aug. | 7 | Lapeer Sportsman's Club at Noon in Lapeer, MI. MAA style tournament with ISAC. Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com |
| Aug. | 7-8 | European Championships at Tautavel, France. Contact Pierre Matheus.* |
| Aug. | 14-15 | European Championships at Zug, Switzerland. Contact Pierre Matheus.* |
| Aug. | 20-21 | Great Lakes Primitives Summer Gathering, 3:00p.m. on Bois Blanc Island, MI. MAA style tournament with ISAC first day and European Contest with ISAC second day. Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com |
| Aug. | 21-22 | European Championships at Beaune, France. Contact Pierre Matheus.* |
| Aug. | 28-29 | Stone Tool Technology Show, Letchworth State Park, Castile, NY. Contact Bob Berg (607) 687-4064. |
| Aug. | 28-29 | Ahlman's Shooters Round-up at Ahlman's 2 miles north of Morristown, MN - Note, Big Red will be there. Contact Dale Torma (218) 865-7049. |
| Aug. | 28-29 | Atlatl Contest with ISAC at Letchworth State Park, Castile, NY. Contact Bob Berg (607) 687-4064. |
| Aug. | 29 | ISAC Competition in Italy, at WWF Natural Oasis of Palo Laziale, Rome, Italy. Contact Bruno Morucci arca@fivenet.com or Pierre Matheus* |
| Sep. | 4-5 | Ohio Atlatl Association Competition at Flint Ridge, Ohio. WAA ISAC and OAA Standard Accuracy contests both days from 11:00 a.m. Contact Ray Strischek (740) 592-3465 or 592-1217, or Jim Kingery 1-800-600-7178. |
| Sep. | 4-5 | European Championships at Oerlinghausen, Germany. Contact Pierre Matheus.* |
| Sep. | 10-12 | Old Fort Madison Trade Fair on Historic Riverview Park, Fort Madison, IA. In addition to atlatl competitions, tests of skill with bow and arrow, hawk, knife, and lance plus much more. Contact Wayne Hagmeier (319) 463-7367. |

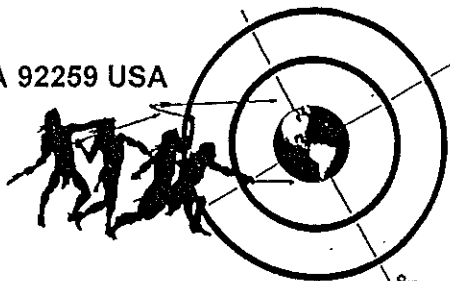
- Sep. 11 Chelsea Rod & Gun Club 3-D shoot. (Field points only please). 8:00 a.m. to 4:00 p.m. at Chelsea, MI. Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com
- Sep. 11-12 World Atlatl Association 12th Annual Meeting and Atlatl Contests, Cahokia Mounds State Historic Site, Collinsville, IL. Contact Ron Mertz (314) 822-2514.
- Sep. 11-12 European Championships at Altamira, Spain. Contact Pierre Matheus.*
- Sep. 17-18 Fort Osage Knap-in and Atlatl Competition, Fort Osage National Historic Landmark, Missouri. Contact Ron Mertz (314) 822-2514.
- Sep. 18-19 Pennsylvania Championship and Deer Hunt, Naugle's Game Farm 1½ miles east of Rt. 219 on Rt. 30. Contact Chuck Butorajac (724) 238-6878.
- Sep. 18-19 European Championships at Samara, France. Contact Pierre Matheus.*
- Sep. 24-26 Bois D'arc Rendezvous south of Joplin, MO. Contact Ray Madden (417) 718-0962.
- Sep. 26 Chelsea Rod & Gun Club 3-D Shoot. (Field Points only please) 8:00 a.m. to 4:00 p.m. at Chelsea, MI Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com
- Oct. 3-4 Mercyhurst Flintknapping and Atlatl Contest, Mercyhurst College, NE Pennsylvania. Contact Bob Berg (607)687-4064
- Oct. 9-10 European Championships at Langon France. Contact Pierre Matheus.*
- Oct. 9-10 Local Atlatl Contest with ISAC at Candor, NY. Contact Bob Berg at (607) 687-4064 or 1-800 836-4520.
- Nov. 6 Second Annual Indoor Icicle ISAC and local contest at Tioga Park, Nichols, NY. Contact Bob Berg (607) 687-9065 or 1-800-836-4520
- Nov. 6 1999 Michigan Atlatl Championship at Chelsea Rod & Gun Club, Chelsea, MI. This will include an intensive one day collection of contests open to everyone: 3-D course with 30 throws, European Tournament with 30 throws, MAA Tournament with 12 throws, and ISAC with 10 throws. Contact Jim Gilligan (810) 231-2314 or atlatl@tir.com

*Note, the new Secretary for European Championships is Pierre Matheus, Rue Haie Delle Praye, 15, B4671 Saive, Belgium, Telephone (32) 43 62 14 14. Our previous contact, Pascal Chauvaux, Rue Au dela de l'Eau, 3 B-5630, Cerfontaine, Belgium - Telephone: (32) 71 64 34 16 or atlatl@skynet.be can still be contacted for assistance, as well.

Please send us dates of atl原因 events for inclusion here, and keep submitting your reports, cartoons, and suggestions to us. Your editor can be reached by FAX at (303) 755-1145, or mail at 1390 S. Paris Court, Aurora, CO 80012, phone (303) 755-5591, or by e-mail: atlatl@mho.net

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