

# The ATLATL

Volume 24, Number 2

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## A Unique Naturalistic Petroglyph of a Basketmaker Atlatl

By Justin Garnett and Devin Pettigrew  
Research funded by Chris Henry



Fig. 1: Atlatl Rock with scale

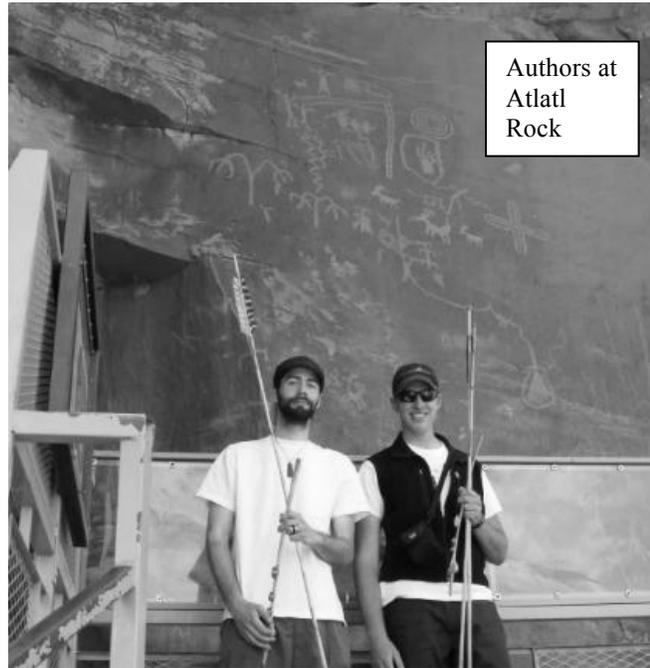
Atlatl Rock forms the centerpiece and backdrop for the World Atlatl Association's Valley of Fire annual event. This rock is a huge Navajo sandstone outcrop, with blackened lower walls that have been adorned with fine petroglyphs by generations of pre-puebloan-peoples. Early 19th c. archeologists came up with the term "Basketmaker", as a convenient demarcation for pre-puebloan phases in the Southwest. These are the people who crafted the leather finger-loop bearing

atlatls used today, which we have come to call “Basketmaker atlatl”. The Basketmaker II people thrived in the American Southwest from about 3,000 years ago to about 1,500 years ago.

High on the south facing wall of Atlatl Rock is a truly inspiring petroglyph panel for us atlatlists—a Basketmaker atlatl atop a dart, complete with naturalistic (although simple) representation of the fletch. It’s a wonderful petroglyph, and makes you wonder what purpose it served. Was it commemorative, symbolic to priesthood, a clan symbol, just personal expression, or something else? Whatever it means, what it represents is entirely unambiguous, and that’s unique in the world of atlatl petroglyphs.

Most Basketmaker atlatl petroglyphs are highly stylized, to the point that their direct interpretation can be iffy. Atlatls and darts are often portrayed in the same manner--as lines with a circle or oval superimposed over them. For atlatls this oval represents the fingerloops, and for darts the fletch. There are other forms of representation but these often rely upon context to be properly identified.

The atlatl rock petroglyph is not only naturalistic, it also appears to be represented in a 1:1 scale. In other words, it is lifesize. Digital analysis of carefully composed photographs (figure 1) has revealed the approximate dimensions of the atlatl and dart set (table 1). It must be noted that whereas the atlatl’s dimensions are wholly within the bell curve of what is considered “Normal” by today’s standards, by the same token the dart is on the short side. This is unsurprising, since the Basketmaker culture can be characterized as using shorter darts than are popular today, although experimentation with darts this size by Pettigrew has demonstrated their effectiveness.



Atlatl	Cm	Inches
Length (Overall):	62.99	24.80
Working Lever:	53.66	21.13
Handle*:	5.65	2.23

*\*Length protruding proximal to loops*

Dart	Cm	Inches
Length (Overall):	131.00	51.58
Fletch length:	14.29	5.63
Fletch height:	2.10	0.83

**Table 1**

atlatl event. We hope to see you there next year and in the years to come, and that you take the time to climb the ladder to pay your respects to what may be the finest naturalistic atlatl petroglyph in the world.

Drawing is still basically the same as it has been since prehistoric times. It brings together man and the world. It lives through magic. Keith Haring

# World Atlatl Day June 4<sup>th</sup>

by atlatldart aka Linda Brundage

From all over the world, the challenges continue to arrive for the World Atlatl Day Team competition to be held on June 4<sup>th</sup>. So far we have sixteen states and five countries that have reported in.

To refresh everyone of the rules:

1. World Atlatl Day is set for June 4<sup>th</sup>.
2. Teams of 3 throwers on a flight, using an ISAC target with an ISAC score sheet.
3. Throwing distances will be measured at 10, 15, 20, 25 and 30 meters. Competitors will each have a turn throwing in rotation, from each distance and then go through it a second time. One entry per team, but an individual may throw on more than one team.
4. Each competitor's scores will be added up for their final score. All the final scores will be added together to make the Team total score.
5. Options for team roster can be any combination of men, women, youth.
6. Scores will be done on the honor system and e-mailed to [atlatldart1@gmail.com](mailto:atlatldart1@gmail.com) to be tabulated and the final placement of Teams will be posted on Paleoplanet, the WAA Face Book site, in the upcoming newsletters (WAA Atlatl, NYAA, South Texas Atlatl etc.) and in private e-mails to the host who sent the scores in.

If you also want to hold ISAC competitions on the same day, you still must list it as an event with the Secretary of the WAA for the calendar, for your ISAC scores to count. (If you have collected more than three people, it is a good chance to get another ISAC score in for the year).

Winners will receive bragging rights to rub in for the next year (and if you have a kindly host, who knows what else might be thrown in as a reward – I have heard rumors.....).

I am anxious to see how many people we can get all throwing sticks on one day, just for the love of the sport.

Please, if you have any questions, feel free to contact me at [atlatldart1@gmail.com](mailto:atlatldart1@gmail.com) and put "atlatl" in the subject line. If you don't hear promptly back, resend an e-mail in case it has gotten sent to the planet cyberspace.

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## Membership Drive

All,

Although membership has dropped over the past few years I think we have finally stabilized and may be starting to slowly creep back up. Low membership isn't just a condition that our organization alone has undergone. Other organizations have had a similar decline. There may be several factors that are affecting this. The economy is certainly a significant one. Many people are without jobs and simply don't have the extra money. I have gotten letters from long time members who have told me they have to temporarily drop their membership because of financial hardship. Another factor, that may be more significant than the economy, is the Internet. There is so much good information out there for free, including our website, that there isn't much incentive to join or keep up a membership. All that Internet information is a good thing but it has its side effects.

It amazes me the number of people who come and participate in the events year after year and never join or let their membership lapse. This year almost 50% of the 30 recipients of ISAC award plaques will be non-members. We need to improve this. In this issue is a copy of membership applications. I am asking all of you to join in a membership drive and try to sign up at least 5 new members this year. If each one of us can reach this goal we can grow our membership by large number. Some of you have done extremely well signing up new members in past years. If we can all do as well, there is no telling how much we can accomplish.

Thanks, Richard Lyons, WAA Executive Treasurer

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## The 2011 season of the ISAC

So far this year, through March, there have been eight states that have hosted 22 events which have been attended by more than 100 competitors who have made nearly 200 entries in the International Standard Accuracy Contest. In the top ten for the men, Bob Kitch (93-3X), Matt Graham (90-X) and Greg Maurer (88-X) have all made personal best efforts (Matt Graham is only the sixth person in ISAC history to make a debut showing on the list with a score of 90 or better). Also, Ryan Grohsmeyer (90-2X) has tied his personal best. On the leader board for the women, Laura Kramer (64) and Carey McCormack (60) have made personal bests. And for the moment, Sue Mercer is for her first time on the top of the list. Only a few youth have competed so far and Marlin Bassett is the only one on the list. April showers, May flowers and more scores will be on the way.

### The World Atlatl Association, Inc. International Standard Accuracy Contest (ISAC) 15-Apr-11

#### 2011 ISAC Results for Men (70 and above)

1 96x	Douglas Bassett	Warsaw NY	2/26/2011	Jim's Pro Shop- Shortsville, NY
2 94xx	Doug Majorsky	Elcajon CA	3/25/2012	Valley of Fire, NV
3 93xxx	Bob Kitch	Husum WA	2/18/2011	Wintercount, AZ
4 90xx	Ryan Grohsmeyer	Calloway MD	2/19/2011	Alfred University, Alfred, NY
5 * 90x	Gary Fogelman	Turbotville PA	3/24/2012	Valley of Fire, NV
6 * 90x	Matt Graham	Boulder UT	2/13/2011	Wintercount, AZ
7 88x	Greg Maurer	Vergennes VT	2/26/2011	Jim's Pro Shop- Shortsville, NY
8 87xx	Mike Waters	Greenwood NY	2/19/2011	Alfred University, Alfred, NY
9 86x	Andy Majorsky	Derry PA	3/25/2012	Valley of Fire, NV
10 86	Jim Gnapp	Abbots Ford BC	2/14/2011	Wintercount, AZ

#### 2011 ISAC Results for Women (50 and above)

1 72x	Sue Mercer	Attica NY	2/12/2011	Wintercount, AZ
2 71	Lori Majorsky	Derry PA	3/27/2011	Valley of Fire, NV
3 69	Melissa Dildine	Sayre PA	2/05/2011	Elmira, NY
4 * 64	JoAnne Fogelman	Turbotville PA	3/26/2012	Valley of Fire, NV
5 * 64	Laura Kramer	Salem OR	2/17/2011	Wintercount, AZ
6 62x	Margie Takoch	Wintersville OH	3/26/2012	Valley of Fire, NV
7 60	Carey McCormack	Carlsbad CA	3/26/2012	Valley of Fire, NV
8 58	Mary Riemersma	Cascade WI	3/26/2012	Valley of Fire, NV
9 50	Regina Dodson	Cheyenne WY	3/12/2011	Romero Atlatl Park, WY

#### 2011 ISAC Results for Youth (40 and above)

1 44	Marlin Bassett	Warsaw NY	3/12/2011	Jim's Pro Shop- Shortsville, NY age 8
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\* indicates ties which have been placed in their proper order, using the tie breaker rule

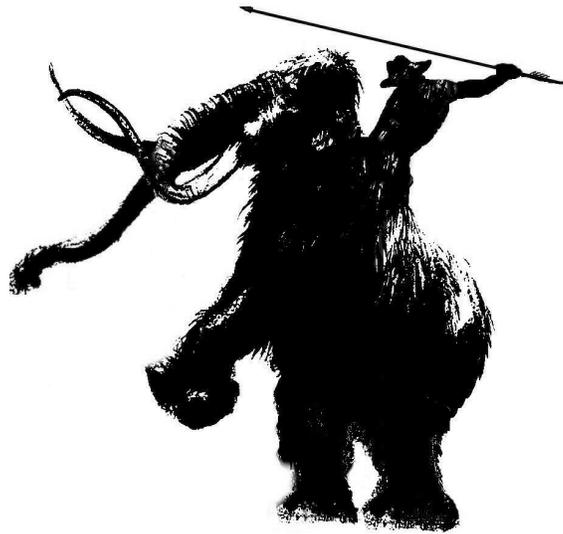
MEMBERSHIP APPLICATION FORM  
**THE WORLD ATLATL ASSOCIATION, Inc.**  
 Dues: \$15.00 per year (Individual) / \$50.00 (Family) U.S. Funds Only

Name: .....	
Address: .....	Club Affiliation: <input type="checkbox"/>
City/State/Zip: .....	PT <input type="checkbox"/>
E-mail Address: .....	Renewal: <input type="checkbox"/>
Phone Number: .....	

Please Checks payable to The World Atlatl Association, Inc.  
 Mail to WAA Executive Treasurer - Richard R. Lewis - 8324 King Road - Shortsville, NY 14750

*SARATOGA,  
WYOMING*

*1981 "Home of the Modern atlatl"  
2011*



*IN CELEBRATION OF THE*

*30<sup>th</sup> ANNIVERSARY OF THE KID'S  
WORLD OPEN ATLANTIC CONTEST, THE  
WYOMING ATLANTIC & SOCIAL CLUB,  
IN ASSOCIATION WITH THE  
SARATOGA MUSEUM,  
WILL BE PRESENTING THE  
2011 KID'S WORLD OPEN ATLANTIC  
CONTEST AND  
THE SARATOGA ATLANTIC SYMPOSIUM  
SATURDAY, MAY 21, 2011.*

*BOTH EVENTS ARE FREE AND OPEN  
TO THE PUBLIC!*

*THE CONTEST SCHEDULE: 8am-12PM*

*LOCATION: SARATOGA LAKE, SANDY  
BEACH AREA*

*THE CONTEST WILL CONSIST OF  
MULTIPLE 3D ANIMAL TARGETS,  
INCLUDING LITTLE ERIC, THE  
MAMMOTH. THE EVENT IS OPEN TO  
INDIVIDUALS AND FAMILIES, ALL  
AGES AND GENDERS WELCOME,  
EQUIPMENT AND TRAINING  
CHEERFULLY PROVIDED.*

*THE SYMPOSIUM SCHEDULE: 1pm-5pm*

*LOCATION: PLATTE VALLEY  
COMMUNITY CENTER*

*THE SYMPOSIUM WILL CONSIST OF  
MULTIPLE PRESENTATIONS ON THE  
SUBJECT OF PREHISTORIC AND  
HISTORIC USE OF THE ATLANTL.  
FOLLOWING THE SYMPOSIUM AN  
AWARDS BANQUET\* WILL BE HELD  
TO HONOR THE PARTICIPANTS IN  
THE CONTEST.*

*\*Per person charge for banquet applies, payable at the  
event.*

*FOR MORE INFORMATION @  
BANQUET RESERVATIONS, CONTACT  
RUSSELL RICHARD  
COYOTECLOWN@AOL.COM  
307-772-0550*

**30<sup>th</sup> Anniversary of the Kid's World Open Atlatl Contest  
& Saratoga Atlatl Symposium  
May 20-22, 2011  
Saratoga, Wyoming**

**Schedule of events:**

**Friday, May 20, 2011**

The Wyoming Atlatl & Social Club and Rod Laird will participate in the Carbon County End of School Year Bash by providing a hands-on demonstration of the basics of manufacture and use of the atlatl and dart system (along with a dose of archaeology and modern historical use). Also scheduled will be ongoing ISAC (International Standard Accuracy Contest) throws and an evening social gathering at camp.

**Saturday, May 21, 2011**

30<sup>th</sup> Anniversary of the Kid's World Open Atlatl Contest at Saratoga Lake, Saratoga, Wyoming. Registration opens at 8:00 am. Contest 8:00am-12:00pm. Challenging and fun course with realistic hunting scenarios, multiple 3D targets, and other assorted tests of skill and derring-do, including ISAC throughout the day. The finals for the contest will occur around 11:30 with awards for those not attending the banquet taking place before noon.

12:00-1:00 Lunch

1:00-5:00 Saratoga Atlatl Symposium at the Platte Valley Community Center.

Three speakers per hour, nine total slots (15 minute presentation and 5 minutes Q&A), plus intermission, introductory, and closing remarks. Poster displays in the lobby.

5:00-6:00 Social hour and Silent Auction to benefit the Saratoga Museum.

6:00/6:30-? Banquet and ceremonies, followed by entertainment and dancing around the fire at the lake.

**Sunday, May 22.**

7:30-8:30 Breakfast gathering hosted by WA&SC (time subject to change).

8:30-11:00 ISAC contest and final atlatl challenges.

11:00-? Tearful goodbyes and clean-up.

**Saratoga Atlatl Symposium Presenters (as of March 15, 2011)**

Regina Dodson: (Reading for Leni Clubb) The Resurgence of the Atlatl and Dart-How It All Began.

Russell Richard: Chronology of Historical Atlatl Use in Wyoming

Keynote Speaker-Dr. Danny Walker: Atlatl Weights of Wyoming

Neal Matheson: Ancient Technology in the Old World

David Sheppard: Atlatl Evolution

Rod Laird: "All They Do Is Whittle On Sticks"-A Classroom

Learning Activity in Saratoga Middle School Goes Global

**Poster Presentations: (as of March 15, 2011)**

Anthropological and Popular Literature of the Atlatl

Depictions of Magdalenian Use of the Propulseur by Clarys

The Mammoth Hunters of Allen Dennoyer

**Rod Laird, father of the Modern Atlatl .**

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## Wintercount 2011

By Carol Sizemore

While others were battling freezing temperatures and shoveling snow, we were basking in 78-80 degrees weather and enjoying our time together at Wintercount.

We were thrilled that Ron and Pam Mertz, Douglas Bassett and Sue Mercer were able to join us again this year.

Several people scored their personal best. Bob Kitch threw a 93XXX, which was the highest score of the week. Congratulations Bob!

Our field round stayed busy and the distance throw was equally active this year. A total of 40 atlatl's were distributed as prizes, all made by Bob Sizemore.

There was a small sprinkle of rain on Friday, but the amazing double rainbow that followed was quite a treat. Unfortunately, the weather turned windy and rainy on Saturday, with wind gusts of up to 45 mph, so we had to cancel the last ISAC of the week. Douglas Bassett found it interesting to throw in that kind of cross wind, but he could not find any takers to participate in an ISAC that day.

We all had a great time, and are looking forward to Wintercount 2012.

RESULTS: Men's Atlatl Field Round - 1. Douglas Bassett: 77; 2. Jim Knapp: 68; 3. Matt Graham: 63.  
Women's Atlatl Field Round - 1. Kirsten Rechnitz: 45; 2. Sue Mercer: 43; 3. Laura Kramer: 33.  
Youth Atlatl Field Round: 1. Theo Arden: 30; 2. Jacob Oliphant: 21; 3. Zarchy Distefano: 18.  
Junior Atlatl Field Round - 1. JB Tolson: 39; 2. Bear Tolson: 36; 3. Jasper Clarkson: 15.  
Men's Archery Field Round - 1. Aram Barsch: 125; 2. Michale Morgart: 110; 3. Rusty Sparks: 105.  
Women's Archery Field Round - 1. Katherine Jolda: 57; 2. Trica Oshant: 41.  
Youth Archery Field Round - 1. Theo Arden: 58; 2. Damian D'Amato: 49; 3. Romeo Conners: 46.  
Junior Archery Field Round - 1. Cheyenne Barsch: 42; 2. JB Tolson: 39; 3. Bear Tolson: 36.  
DISTANCE: Men: 1. Douglas Bassett: 541.06; 2. Chase Moore: 423.96; 3. Charlie Tadano 347.34.  
Women: Heidi Hydrick: 248.7; Sue Mercer: 215.65; Jera Pennington: 156.54.  
Youth: 1. Theo Arden: 207.2; 2. Bear Champlain: 198.0; 3. Daniel Ziegler: 174.88.  
Juniors: 1. Bear Tolson: 120.9; 2. JB Tolson: 82.87.

## CANDOR FALL FESTIVAL!

Gary Fogelman was the Grand Champion of the Candor Fall Festival Columbus Day Weekend in October.

The event was held at the Side Hill Acres Goat Farm in Candor, New York.

Jack Rowe came in second and Melissa Dildine and Wayne Wells tied for third. The contest included shooting at pumpkins and a cardboard deer target. There was also a Pumpkin Penetration Round where atlatlists had to see whose dart would pierce the deepest into a pumpkin target.

Thanks to all that came and participated in ISACs and the local contest. Saturday challenged atlatlists with brisk winds but some were able to better their scores on the ISAC round. Congratulations to all.

### .Stoneage Workshops in Germany With Bob Berg and Craig Ratzat

Join Bob Berg and Craig Ratzat in Europe this summer when they offer a step back into the Stoneage.

The two experts in the fields of atlatls and flintknapping will present two days of atlatl/dart making and flintknapping workshops at two different locations in Germany. Practice some of humankind's earliest technologies in a goal oriented environment with these two experts in the primitive arts field. This class is suited for anyone who is interested in the fields of atlatls, primitive technology, outdoor survival, archaeology, anthropology or just a desire to learn about these subjects in an experiential manner.

Both two-day workshops will be similar. The first work shop will take place at Bad Eisenbach, Thursday, June 30 and Friday, July 1. The second workshop will take place at the Bad Münstereifel Archery Club, July 9 & 10. Materials will be provided that include flint for stone tools, bamboo and wood for atlatls and darts as well as fiber for cordage and bow strings. Participants will learn to work with natural glues, oils and resins for use in sizing, hafting and joining.

A web page is being developed to promote the workshop. For further information, contact Bob or Cheryll Berg at Thunderbird Atlatl, 800-836-4520 in the United States or 607-659-3854 if calling from outside the United States. For further details and information check out the website at [www.atlatls.net](http://www.atlatls.net) or contact Bob Berg at [Bob@thunderbirdatlatl.com](mailto:Bob@thunderbirdatlatl.com)

"I'm not in competition with anybody but myself. My goal is to beat my last performance."

- Celine Dion

**ILLUSTRATED NOTE ON ATLATL  
SPURS  
IN THE ARCHAEOLOGY OF CUBA**  
Alfredo E. Figueredo

NOTE: this article is translated by the author from the original Spanish and abridged for The Atlatl, courtesy of the original publisher *Cuba Arqueológica*, 3(1). The complete article in both Spanish and English can be found on the WAA webpage at <http://www.worldatlatl.org/AtlatlNewsletter.html>

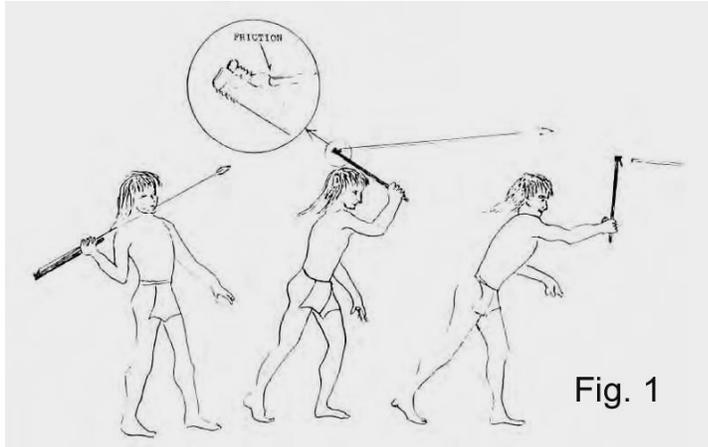


Fig. 1

This brief illustrated note deals with atlatl spurs (known in Spanish as *ganchos de tiradera* or *ganchos de garrucha* and other names) in the context of the archaeology of Cuba. These artifacts are one *element* of a *composite artifact*: the *atlatl* itself, which is in fact a worked stick; the *binding* of the spur to the atlatl, consisting of string and maybe glue; and the *strap handle* for the hand of the individual wielding the atlatl, which may be of leather or cordage (see Figures 1 and 2 for its use and the spur's position).

The first atlatl spur reported for the Antilles was published by Alanson Buck Skinner (Skinner 1925; Figure 4). This spur is made from a *greenstone*, probably nephrite. It was found in a multicomponent midden near the city of Christiansted. It is of a form common worldwide, therefore Skinner, who had much ethnographical

experience, had no difficulty identifying it.

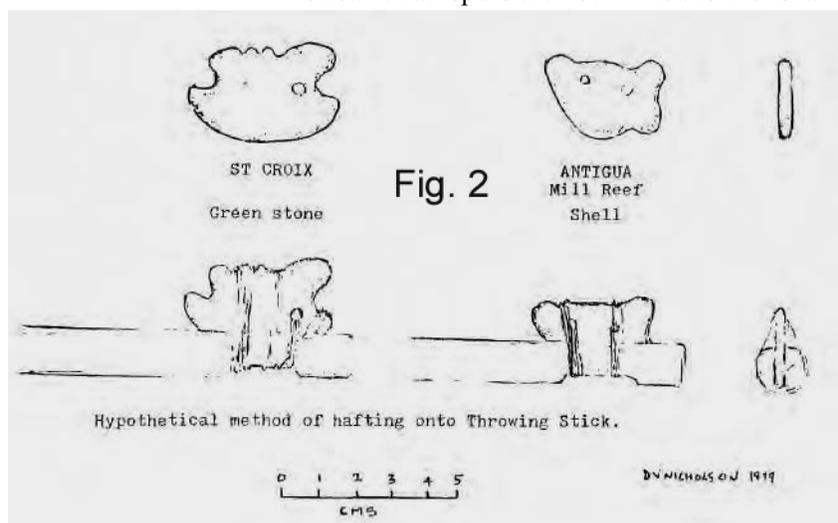
The second was identified by the writer of this note, on the island of Antigua (Nicholson 1980; Figure 3). It comes from the Terminal Saladoid (about 700 B.C. to about A.D. 400) occupation of the Indian Creek site, in the eastern part of the island, near an estuary and the sea. It is made of shell. Due to its form, at first it was considered by others as a simulation of a phallus, until I compared it with other specimens from

California. Now it is defined as an atlatl spur of the 'snake head' type. Later, some similar spurs and others of different types were identified from the same island. Most are made of *greenstone*, almost always nephrite or jadeite, and some of shell.

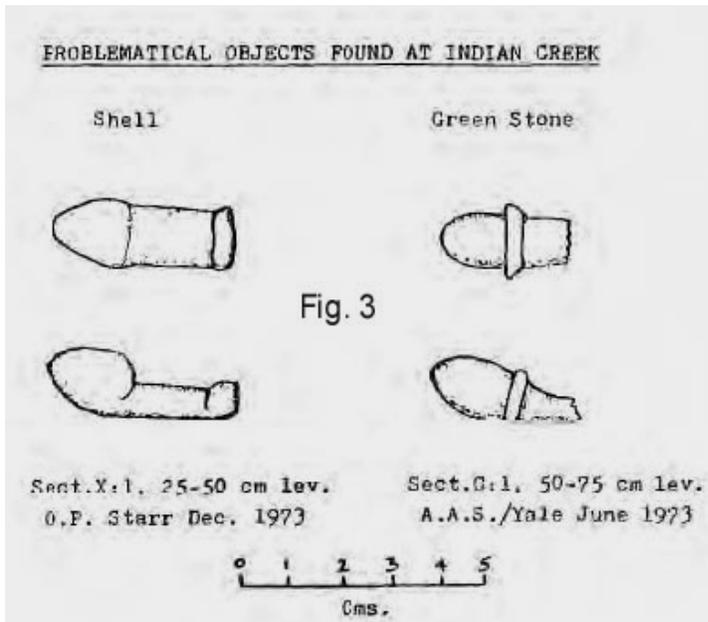
After Nicholson presented the Antigua spur mentioned above at the VIII Congress of the International Association for Caribbean Archaeology in 1979, other delegates also identified atlatl spurs from the collections of their respective countries. At that time, no atlatl spurs had been identified from Cuban collections.

However, they were indeed reported, as will be seen below, but never identified as such. Some with a perforation for the binding were thought to be pendants or ornaments. William F. Keegan told the author personally, that in his experience, any object which would be part of a composite artifact, as long as it has any perforation, is immediately identified throughout the world by the less curious as a bead or a pendant.

Cuban atlatl spurs are not limited to the 'snake

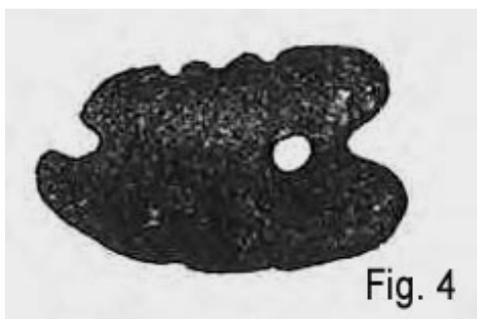


head' type, or the similar 'acorn' type; other types are found, such as that in Figure 4, those in Figures 5, 6, 7 and 8, and perhaps others yet to be discovered. Figure 10, below, illustrates the most



representative 'snake head' type, from the site Concordias Juder on the island of Saint Croix (on top is the fragment of another similar one of the same provenience, lacking a head).

The beginnings of a typology seem to arise already from the literature. The acorn type is not documented for the Antilles. The similar snake head type has an ample distribution. The type in Figure 2 and Figure 4 is as well distributed as the



snake head type, and is similar to the atlatl spurs of the

extreme north of the Americas, used among the Athabaskans or Na-Dené and the Eskimos or Inuit. Nicholson (1980, 402) calls the form of this type 'leaflike', and they may be called 'folioform'.

Others (Figure 6: 40, 62; Figure 7, 1-3) seem to be a more simple and less tabular version; 40 is very eroded. There are some which are elaborately sculpted in the round (Figure 6: 88),

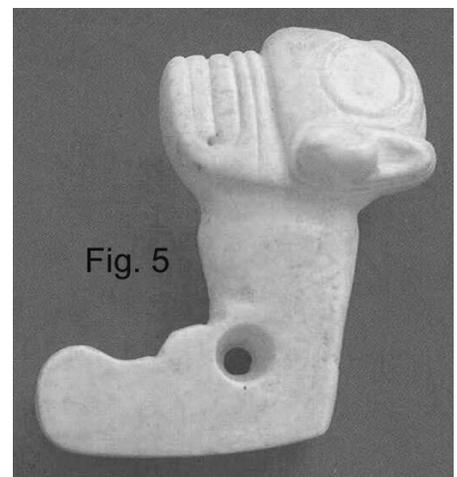
but these are very rare. More commonly the tabular type has a superimposed head, more or less human, worked in the round (Figure 5; Figure 8). These might be called 'skull spurs'.

Types similar to the folioform are also frequent, which are not tabular, and have very artistic forms, more or less rounded, but which approximate its basic function as to position and use (Figure 7, 4-5). Since there is a similarity to the shape of the shields of the peltasts or light infantry of ancient Hellas, the folioform type and these may also be called 'peltamorph'.

Recently, on the island of Vieques, artifacts made out of semi-precious or precious stones such as serpentine and jadeite have been found, in the form of birds of prey (condors?) each bird grasping an object in its talons, perhaps a human head (Figure 9; Chanlatte Baik and Narganes 1980; Boomert 2001). My impression, ever since I saw them at the VIII Congress, is that these artifacts are atlatl spurs, and the

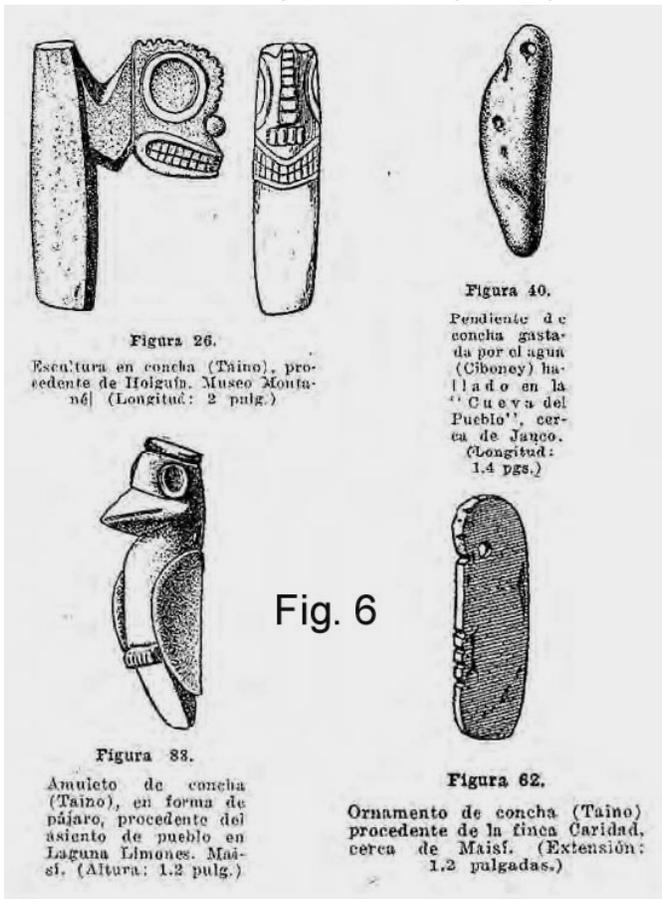
condors with human heads in their talons represent a culture that not only used atlatl, but also practiced head-hunting. This culture is the problematic Huecoid Series, until now limited to the east of the Greater Antilles, above all Puerto Rico and Vieques, and the more-or-less northern Lesser Antilles, and dating more or less from B.C. 500 to A.D. 150 (Chanlatte Baik and Narganes, 1980).

In summary, the illustrations show that Harrington (1921) was seemingly the first to find atlatl spurs in a Cuban archaeological context, but he did not



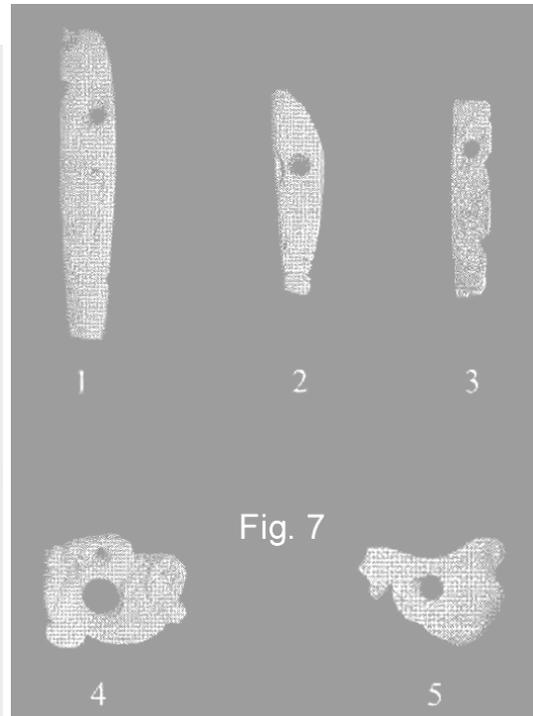
recognize them as such. Thirty-five years later, José Álvarez Conde (1956) in his synthesis *Arqueología Indocubana*, illustrates several atlatl spurs, but does not identify them either. Finally, a contemporary postcard publishes an atlatl spur

from Potrero del Mango, Banes, Holguín (Figure

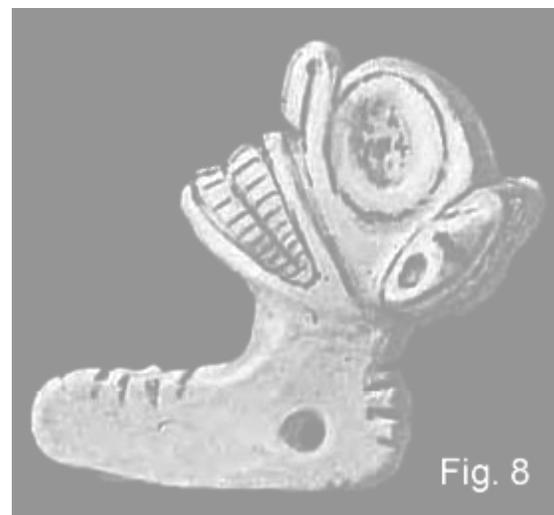


5), almost identical to others published before by Fewkes (1903; Figure 8) from the Dominican Republic, and Harrington (1921; Figure 6: 26) found in Cuba.

Nicholson (1980, 397) estimates that the average distance reached by a dart propelled by an atlatl is around 100 meters; but with good aim, about a fourth of that distance. The Eskimo or Inuit used small light darts to hunt seals with atlatl at a distance of from 30 to 50 meters, 'with considerable aim and force'. In experiments, it has been demonstrated that an atlatl increases by some 58% to 60% the range of a dart or a javelin. Nicholson (1980, 400) adds that, in his opinion and that of others he cites, the atlatl had a double purpose: for warfare, and to hunt aquatic or semi-aquatic animals. The Aztecs or Mexica came to Anahuac with only bows and arrows; once in the region of the great lakes, they adopted the *atlatl*, as they themselves called it, for hunting in the lakes, and also, naturally, for war. Nicholson suggests three reasons to favor the atlatl over the bow and arrows, but the two first are unlikely.



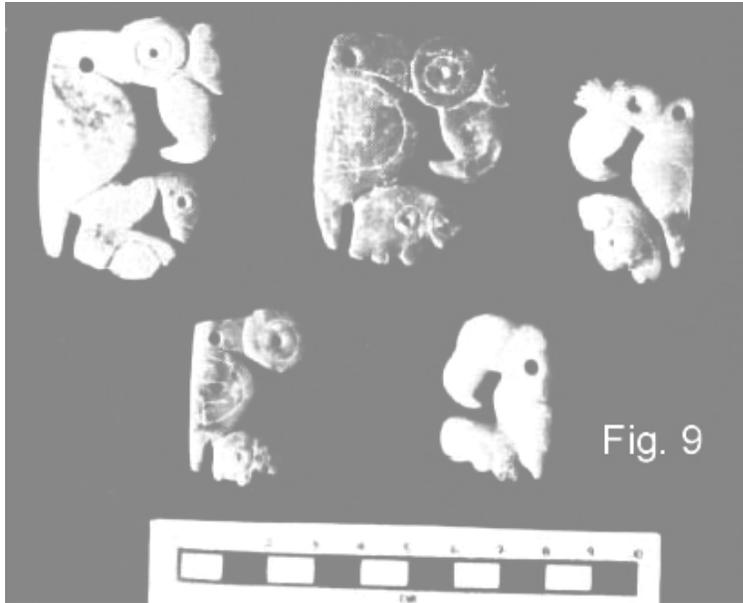
Nicholson proposes, in the first place, that bows and arrows are impossible to handle in a canoe, while the atlatl gives no problems. Secondly, water could weaken the string of the bow. This is contradicted by the many cases reported of Indians firing bows and arrows from canoes, whether in the Caribbean or in Amazonia. His third reason is more likely: the atlatl is better



than a bow for propelling a dart (or harpoon) attached to a string in order to recover the quarry. Even today, the Tarasca or Purupecha hunt ducks and geese in the Lake of Pátzcuaro with atlatls

(Nicholson, *op. cit.*), and we mentioned above the hunting of seals by the Eskimo or Inuit.

Sven Edvard Lovén (1935) followed several historians of the Indies by calling the atlatl by the



name of *garruchas*. He was convinced that these *garruchas* originated in Colombia, thence diffusing slowly towards the east and north. Nicholson (1980, 396) agrees with other authors that the atlatl began to be used during Period I, or the Palaeo-Indian period, but this inference is based on little data. It is too early to say much about the chronology of these atlatl spurs. A very eroded sample found by Harrington in Cuba (Figure 6: 40) seemingly is from an ‘aceramic’ or ‘archaic’ context. Most spurs in Cuba are found in Meillacoid and Chicoid contexts, A.D. 800 to A.D. 1550. These are cultures with well-defined chiefdoms, living in large villages with ceremonial plazas for the ball game and other rituals. They are pottery-making agriculturalists depending on manioc, corn and sweet potato. Elsewhere in the Caribbean atlatl spurs appear in Saladoid contexts, and they seem to continue right up to the end of the ceramic sequence, since Figures 5 and 6: 26 adhere to the canons of classic Taíno art.

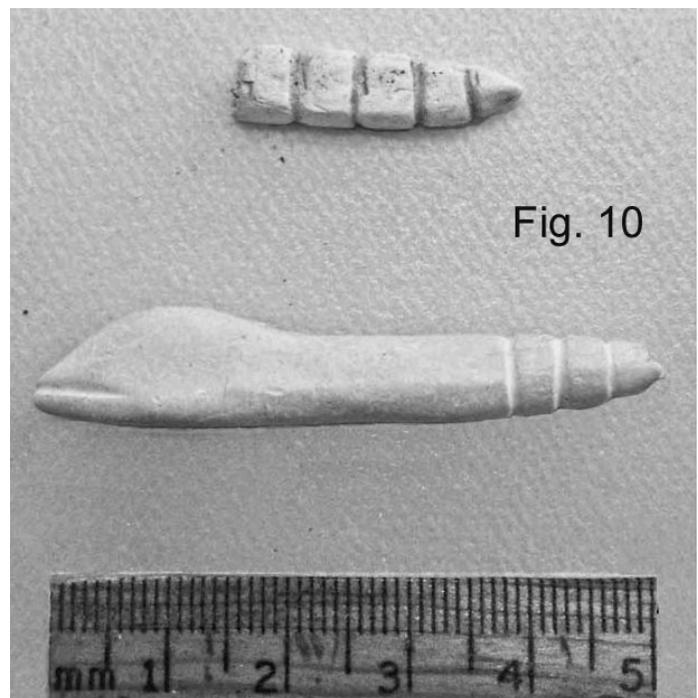
Regarding the darts propelled by these atlatl or *garruchas*, there are several possible samples in archaeological collections. A dart (illustrated by Harrington 1921, Figure 103) was found in the muck of Laguna de Malpotón, Pinar del Río, Cuba, and is pretty complete; it measures 41.2

inches [*ca.*1.2 m.]. Harrington identifies it as an arrow, but it could also be an atlatl dart. The historical sources mention points fashioned from the spines of stingrays and from flint (*cf.*

Figueredo 1974; Figure 3, Figure 2) or of fire-hardened wood (Las Casa), as seems to be the case with the one reported by Harrington.

According to Las Casas (1559/1951), the bows and arrows used by the Taínos of eastern Cuba were among the worst in the Antilles, much inferior to those of Jamaica, Puerto Rico, and elsewhere. The illustrious bishop estimated that their effective range was 50 paces, or only some 10 paces more than an Australian aborigine atlatl. Nicholson (1980, 400) follows Lovén (1935) considering that the ‘dark wood’ for making strong bows was lacking in some parts of the Antilles, and this means that in certain regions, the weak bows made from other woods

could not compete with the atlatl. There is not much data to support this opinion, but it is probable that in Cuba and other places, the missile weapon preferred for the hunt and for war was the dart or javelin propelled by an atlatl.



## Figures

### Figure 1:

Atlatl and spur in use, from Nicholson 1980.

### Figure 2:

Hypothetical method of attaching spurs to atlatl, from Nicholson 1980.

### Figure 3:

Indian Creek atlatl spurs, from Nicholson 1980.

### Figure 4:

Peltamorph atlatl spur reported by Skinner 1925, island of St. Croix.

### Figure 5:

Shell atlatl spur found at Potrero del Mango, Banes, province of Holguín. Photo taken from *Coleccionables of the Boletín del Gabinete de Arqueología*, No. 5, año 5, 2006.

### Figure 6:

Figures 26, 40, 62 and 88 from Harrington 1921. We have preserved the original numbers of the Figures for ease of reference. 26 is a skull spur.

### Figure 7:

Atlatl spurs illustrated by Álvarez Conde 1956. Numbers 1-3 are more-or-less tabular, numbers 4-5 are peltamorph.

### Figure 8:

Atlatl spur from the Dominican Republic, Archbishop Meriño Collection; illustrated by Fewkes 1903. A skull spur.

### Figure 9:

Probable atlatl spurs from the site of La Hueca, Vieques, Puerto Rico, illustrated by Chanlatte Baik and Narganes 1980.

### Figure 10:

Fragment without the head (above) of an atlatl spur, and a snake head type atlatl spur (below), from the Concordias Juder site, island of St. Croix. Photo courtesy of Richard T. Gartley.

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## DART FLEX

### Conversion of stored energy to enhancement of forward propulsion.

Richard B. Lyons

It's easy enough to conceptualize that when a dart becomes flexed during launching with an atlatl, that it is storing energy (Perkins-Leininger, 1989). Certainly the flexing back and forth that a dart does during its flight is releasing this stored energy, but how is it adding anything to forward motion. I think there may be a factor that has been overlooked. It was the probably unintended consequence of adding fletching to a dart. With the addition of fletching there is a whole new dynamic taking place beyond keeping the dart on a straight path. In this scenario the fletching is acting much the same way a fish's tail does in propelling it through the water. As the surface area of a fish's tail is flexed back and forth it pushes against the water around it. With this simple motion, a fish can rapidly gain considerable speed and forward motion. This is the same motion a dart makes as it flexes back and forth during flight, with the fletching acting just as the fish's tail does. Of course air is less

dense than water, but there is still enough density for a properly fetched dart to push against and aid in forward motion. How much this adds to the forward motion of the dart I don't know, but I am sure it adds a measurable amount.

Of course as soon as oscillation of the dart ceases, the friction from the fletching keeps the dart on a straight path while gradually slowing it down. By the time the friction of the dart and fletching slows the dart down to any extent, the effective hunting range of the dart has usually been exceeded.

Perkins & Leininger in 1989, also described another factor that aids in forward propulsion. They described how the dart springs off the atlatl hook as the reversal of flex takes place at the point of maximum compression of the dart. It has since been revealed by high speed photographs. These photographs have shown that the dart is springing off the atlatl hook well before the complete arc of the throwing motion is completed. A thrower can enhance this effect by flexing their wrist towards the end of the throwing motion. By flexing the wrist forward at the proper moment, one can keep the dart on the hook a split second longer. This compresses the dart even more, just before the reversal of flex causes the dart to disengage. That magnifies the rebound effect and results in the dart springing off the atlatl hook with greater force than without the wrist flex. The result is a better release of stored energy.

Of course most of the energy of forward propulsion comes as a result of the atlatl acting as a lever, but that's another story. The two methods described above certainly are adding something. It will take a detailed study to measure just how much. The atlatl and dart is certainly proving to be a marvelously complex system

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### **Primitive, or not primitive?**

#### **What really is the question?**

**Chris Henry/Paleoarts**

April 2nd 2011

When I first joined the WAA, or should I say when I threw my first ISAC, I discovered that there were two classes that one could throw in, 'Primitive' and 'Open'. This, of course, referred to the type of gear one used and I thought it was a reasonable and logical distinction to make. By classifying ones equipment one could garner some information over time based on scores. It wouldn't necessarily tell you what materials were better, but would tell you what the better atlatlists out there were using. Right? Wrong! I soon discovered, as everyone does, that the WAA's definitions of 'Primitive' and 'Open' are a little skewed.

According to the ISAC rules, in order to qualify as 'Primitive' your atlatl and dart must be made from materials available to prehistoric peoples. Modern glues and artificial sinew are an exception and copper points are allowed. Everything else will be considered 'Open'. It sounds sensible at first but the problem, I feel, lies here. Someone with a completely primitive kit, say a hand-made Basketmaker atlatl with rawhide finger loops and a river cane hand fletched dart with hardwood foreshaft, will be thrust into the 'Open' category simply by the addition of a steel field point at the end of their dart. Whereas, someone else can have a manufactured, laminated atlatl with a modern Y rest and a milled dowel dart with precision jigged fletching and a machined pressed copper point on the end and be considered 'Primitive'. You can see the disparity.

As most of us know, from a strictly performance angle there is virtually no difference between a steel, copper, antler, stone or other type of point of equal mass. In fact, I would say that points, aside from their size and weight, play no role in dart performance. The only difference lies in their durability and the reason even the most diehard traditionalists use steel points is because they stand up to abuse and don't have to be replaced every few shots. Now, I understand from speaking to long time WAA members that this distinction was established long ago. At the beginning of the organization, when things were still getting sorted out so to speak and that since then it has just become something of a tradition. But I think we have to ask ourselves why we are making this distinction. Is it to glean some kind of information about modern versus traditional materials? If so, then I feel we're missing the mark. In fact, I think we're creating a bed of false information about what the majority of the atlatl community actually uses. It's my opinion that the rules be amended to remedy this, that the rule about points be changed, or that the distinction between 'Primitive' and 'Open' be eliminated entirely.

Personally, I'm for the former. I think some meaningful and useful data can be obtained, but the criteria needs to be altered.

What do you think?

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### **Hunting Deer with an Atlatl**

**by Daniel E. Schmidt, D&DH Editor**

This is one of the most dramatic deer hunting videos I've ever seen. A 7-year-old Pennsylvania boy takes to the woods with his family, and he collects a mature doe. The twist? He shoots it with an atlatl!

[http://blog.deeranddeerhunting.com/rubline/2011/02/15/HuntingDeerWithAnAtlatl.aspx?et\\_mid=125816&ri\\_d=3429023](http://blog.deeranddeerhunting.com/rubline/2011/02/15/HuntingDeerWithAnAtlatl.aspx?et_mid=125816&ri_d=3429023)

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	<b>North American Atlatl Competition Events 2011</b>
April 29-May 1	Earthday Gathering 389 Simkin Road Elmira, <b>New York</b> Tyoga Atlatl Association event. ISAC, Mastodon Open and NYAA (Team, Individual, Hunter, Distance and European) New York Atlatl Association, Inc. sponsored and Insured. Contact: Jack Rowe (570) 888-8258 <a href="mailto:rjrowe93@gmail.com">rjrowe93@gmail.com</a> or Tom Goble; (607)215-9405
April 30-May 1	Demo, and ISAC. Horicon Marsh, <b>Wisconsin</b> Contact Lenny Riemersma at <a href="mailto:lenmarvr@excel.net">lenmarvr@excel.net</a> (920) 528-7454
May 1	Wausau School Forest. Mosinee, <b>Wisconsin</b> Atlatl building workshop for registered participants, ISAC. For more information contact; Lenny Riemersma at <a href="mailto:lenmarvr@excel.net">lenmarvr@excel.net</a> (920) 528-7454
May 1-7	ISAC in conjunction with the Second Annual Buckeye Gathering, Forestville, <b>California</b> Traditional Arts & Primitive Living Skills at YaKaAma.. Atlatl, cordage, flintknapping, buckskin, and much more. ISAC Monday thru Friday plus open target throw. Contact Bruce Weidman at (925) 937-7424. For more about the gathering, go to: <a href="http://buckeyegathering.net">buckeyegathering.net</a>
May 6-8	May event at Fogelmans, Turbotville, <b>Pennsylvania</b> ISAC, local w/European, NY Events? Camping on premises, bring a dish to share. Contact Gary (570) 437-3698, <a href="mailto:iam@indian-artifacts.net">iam@indian-artifacts.net</a>
May 6-8	Old Stone Fort, Manchester, <b>Tennessee</b> Spring Knap-In, ISAC each day Contact Keith Wimberley (931)723-5073 or <a href="mailto:Keith.Wimberley@tn.gov">Keith.Wimberley@tn.gov</a>
May 13	Lake Hope State Park, Zaleski, <b>Ohio</b> Lake Hope School Days – OAA will be providing instruction to area school students. After the event, we will be doing local competitions, ISAC, IASAC. Time approximately 2:00 pm. Contact Steve Barnett ( <a href="mailto:barnz@juno.com">barnz@juno.com</a> ) (740) 698-6553 more information.
May 13-14	Atlatl hands-on demonstrations and competitions at Montauk State Park near Salem, <b>Missouri</b> The major emphasis on Friday will be introducing the atlatl to youth but both days are also open to experienced and inexperienced adults. The ISAC will be held both days. Contact Jon Wood (573)881-6622 or Ron Mertz (314)628-9376 <a href="mailto:devoemertz@sbcglobal.net">devoemertz@sbcglobal.net</a>
May 20-21	Spring Osage Knap-In, I-70 exit 111, Boonville, <b>Missouri</b> ISAC both days and other events on Saturday. Contact Jon Wood (573) 881-662 <a href="mailto:jswood@mcmssys.com">jswood@mcmssys.com</a> or Ron Mertz (314) 628-9376 <a href="mailto:devoemertz@sbcglobal.net">devoemertz@sbcglobal.net</a>
May 20-22	Jersey Rock and Shoot 88 Angen Rd. Washington, <b>New Jersey</b> ISAC, locals and NYAA events (Team, Individual, Hunter and European). Camping available on site. A New York Atlatl Association, Inc. sponsored and insured event. Contact: Bob Bronish at <a href="mailto:bbronish@yahoo.com">bbronish@yahoo.com</a> or Erich Zeh at <a href="mailto:Eandzkeh@aol.com">Eandzkeh@aol.com</a>
May 20-23	Ameliasburg near Belleville, <b>Ontario</b> Reenactment weekend beginning Friday, May 20th. All the participants are dressed in pioneer clothing and we also have hawk, bow, slingshot and children's competitions through the weekend. Atlatl competition on Monday, May 23 at 10am. All are encouraged to come in period dress, but no one will be turned away. Contact Mike Procter, 2657 Zealand Rd. Sharbot Lake, On., Can. K0H 2P0 tel (613) 279-2572 email <a href="mailto:procter@frontenac.net">procter@frontenac.net</a>
May 20-22	<b>World Atlatl Open 30<sup>th</sup> Anniversary atlatl throw. Saratoga, Wyoming</b> Three day event to celebrate the birthplace of the modern atlatl event, will include a symposium on prehistoric and historic atlatl use. Sponsored by the Wyoming Atlatl and Social Club. Contact: Gary/Regina Dodson <a href="mailto:wyowinds@aol.com">wyowinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclown@aol.com">coyoteclown@aol.com</a> (307) 772-0550 for details.
May 27-29	Letchworth State Park – Castile, <b>New York</b> ISAC (Fri 4pm-Sun 4pm), New York Atlatl Association, Inc. events (Team, Individual, Hunter, National, International & European,) except during picnic time noted below. NYAA fully insured event. "Learn to Catch a Fish Family Picnic" 11am - 4pm on Sat with no fishing license required at a stocked trout pond, free picnic & door prizes, "Spear-fishing" Carp Target Derby and a variety of learning stations. "Red, White and Blue Balloon Rally" with massed balloon flights at 6:30pm Fri-Sun and 6am Sat-Mon, weather permitting. Nearby camping, cabins and lodging available. Call Douglas Bassett (585) 493-3625 for information.
June 3-5	Pioneer Ridge Atlatl Throw, Pioneer Ridge Cnsvtn Area, 1339 Highway 63, Bloomfield, <b>Iowa</b> 52537 located 6 miles south of Ottumwa, IA ISAC all three days, with World Atlatl Day team contest on Saturday Contact Kevin Verhulst <a href="mailto:kevin-verhulst@uiowa.edu">kevin-verhulst@uiowa.edu</a> (641) 777-5053
June 3-5	Genesee Valley Living History Weekend, Maple Lane RV Park – Cuba, <b>New York</b> ISAC and NYAA events (Team, Individual, Hunter, Distance, National, International & European). A New York Atlatl Association, Inc. sponsored and insured event. Camping for tents or RV's with showers/laundry on site. For information contact Douglas Bassett (585) 493-3625 or Linda Brundage <a href="mailto:mailto:atlatldart1@gmail.com">mailto:atlatldart1@gmail.com</a> <a href="mailto:atlatldart1@gmail.com">atlatldart1@gmail.com</a>
June 3-5	<b>South Texas Atlatl Rendezvous 2011, Falcon Heights, Texas</b> Primitive skills gathering at the Duvall Ranch including ISACs for all 3 days, rabbit stick, primitive/traditional archery, knife/tomahawk, and slinging competitions. The rendezvous will also include flintknapping, friction fire starting, and the playing of primitive/traditional instruments. World Atlatl Day Competition on June 4th, including Texas/Wyoming Challenge. Contact Cesario Guerra: <a href="mailto:southtexasatlatl@gmail.com">southtexasatlatl@gmail.com</a> . <a href="http://www.southtexasatlatl.com/TAA.aspx">www.southtexasatlatl.com/TAA.aspx</a>

June 4	Glen Oechsner's Residence. Campbellsport, <b>Wisconsin</b> World Atlatl Day Competitions and ISAC. Contact Lenny Riemersma at <a href="mailto:lenmaryr@excel.net">lenmaryr@excel.net</a> (920) 528-7454
June 4	Athens Public Library, Home Street, Athens, <b>Ohio</b> OAA will host atlatl accuracy contests – Ohio locals, ISAC, IASAC, World Atlatl Day team contests. 10:00 am – 5:00pm. Contact Ray Strisczek for more information, ( <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> ) (740) 331-4351
June 4	Atlatl Park (subject to change), Cheyenne, <b>Wyoming</b> World Atlatl Day-Wyoming/Texas Challenge Contact Red Ranger for information <a href="mailto:coyoteclown@aol.com">coyoteclown@aol.com</a> (307) 772-0550
June 9	River Pierce Archaeology Program 2011 ISAC, San Ygnacio, <b>Texas</b> Atlatl competition will be held during the River Pierce Archaeology Program 2011 at the atlatl range. Contact Cesario Guerra: <a href="mailto:southtexasatlatl@gmail.com">southtexasatlatl@gmail.com</a> . <a href="http://www.southtexasatlatl.com/TAA.aspx">www.southtexasatlatl.com/TAA.aspx</a>
June 10-12	Atlatl-in-Action 389 Simkin Road Elmira, <b>New York</b> Tyoga Atlatl Association event. ISAC, Mastodon Open and NYAA (Team, Individual, Hunter, Distance and European) New York Atlatl Association, Inc. sponsored and Insured. Contact: Jack Rowe (570) 888-8258 <a href="mailto:rjrowe93@gmail.com">rjrowe93@gmail.com</a> or Tom Goble: (607)215-9405
June 10-12	Four Corners Archery Club and the Missouri Atlatl Association – 1st Annual Southeast Missouri Atlatl Challenge, Sedgewickville, <b>Missouri</b> . Open to all, beginners and pro's. ISAC all three days. Modified European Challenge, Hunters Challenge and Running Boar on Saturday (June 11). Contacts: Curtis Waggoner at (573) 866-0046 or <a href="mailto:fourcornersarchery@hotmail.com">fourcornersarchery@hotmail.com</a> Ron Mertz at <a href="mailto:devoemertz@sbcglobal.net">devoemertz@sbcglobal.net</a> Jon Wood at (573) 881-6622 or <a href="mailto:jswood@mcmsys.com">jswood@mcmsys.com</a>
June 10-12	Fort Firelands RV Park, 5850 E. Harbor Rd., Marblehead, <b>Ohio</b> 43440 OAA will provide instruction and conduct atlatl accuracy contests. IASAC, ISAC, and Ohio locals. Contact Ray Strisczek for more information, ( <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> ) (740) 331-4351
June 10-12	-Relic Collectors Rendezvous, <b>Ohio</b> . Artifact show (buy-sell-trade), atlatl contests, flintknapping demonstrations, authentication seminars. 921 St. Rt. 89, Polk, OH 44866. Contact Jim Bennett (419) 945-2893
June 12	Badger State Artifact Show, Henschals Indian Museum, New Holstein, <b>Wisconsin</b> Demo, ISAC, Hunter's Round For more information contact; Lenny Riemersma at <a href="mailto:lenmaryr@excel.net">lenmaryr@excel.net</a> (920)528-7454
June 17-19	Meadowcroft, Avella, <b>Pennsylvania</b> Contact Margie <a href="mailto:theatlatl@gmail.com">theatlatl@gmail.com</a> (740) 264-1755
June 17-19	Fat Blanket atlatl throw & ISAC. Hell Gap Site, <b>Wyoming</b> This event will occur in conjunction with the summer meeting of the Wyoming Archaeological Society at the famous stratified site of Hell Gap. Primitive camping, open to all, equipment and instruction cheerfully provided. Sponsored by the Wyoming Atlatl and Social Club. Contact: Russell Richard <a href="mailto:coyoteclown@aol.com">coyoteclown@aol.com</a> <a href="mailto:coyoteclown@aol.com">coyoteclown@aol.com</a> (307) 772-0550 for location information.
June 23-26	Terry Keefer Memorial Atlatl Tournament – Bald Eagle, <b>Pennsylvania</b> ISAC and New York Atlatl Association, Inc. events (Team, Individual, Hunter, National, International & European). NYAA fully insured event. Camping on site. For information contact Tim Jackson <a href="mailto:PaTeePee@aol.com">PaTeePee@aol.com</a> <a href="mailto:PaTeePee@aol.com">PaTeePee@aol.com</a> (814) 684-0402 or Gary Beers (814) 687-4372
June 24-25	Athens Public Library, Home Street, Athens, <b>Ohio</b> Atlatl Educational Day Camp. OAA will provide instruction and conduct atlatl accuracy contests. IASAC, ISAC, and Ohio locals. 9:00 – 5:00 each day, Friday and Saturday. Contact Ray Strisczek for more information, ( <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> ) (740) 331-4351.
June 24-27	Oxford Rod & Gun Club OxTAR Traditional Archery Rendezvous, Oxford, <b>New York</b> We have expanded from two ISAC opportunities to four by beginning the event Noon Friday June 24 and ending Monday June 27 at Noon. In addition to the ISAC we also will have Woods 3d shoot 30 targets, Charging Boar, Running Deer, Hole the Pig, Night Coon Hunt-3d course at night, Long Range 3d Field Shooting, More, Flint Knapping, Primitive Camping, Vendors, Food, and the club will have new showers! Location: Oxford Rod & Gun Club, 214 Ingraham Road, Oxford, NY 13830 Contact: Allen Bagg 607 244 0711, 315 875 5333, <a href="mailto:atlbagg@yahoo.com">atlbagg@yahoo.com</a>
July 1-3	13 <sup>th</sup> Annual Foothill-Mountain Atlatl and Bow Open. This is the only remaining annual atlatl competition in <b>Wyoming</b> . It is a three-day camping event in a beautiful location that offers a challenging competition and big fun for all ages. Open to all, equipment and instruction cheerfully provided. Sponsored by the Wyoming Atlatl and Social Club. Contact: Gary/Regina Dodson <a href="mailto:wyowinds@aol.com">wyowinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclown@aol.com">coyoteclown@aol.com</a> (307) 772-0550 for location and time.
July 15-16	MOJAM, Marshall, <b>Missouri</b> ISAC and 3-D both days Contact Jon Wood (573) 881-6622 <a href="mailto:jswood@mcmsys.com">jswood@mcmsys.com</a> or Ron Mertz (314) 628-9376 <a href="mailto:devoemertz@sbcglobal.net">devoemertz@sbcglobal.net</a>
July 15-17	Flint Ridge State Park, Brownsville, <b>Ohio</b> OAA will provide instruction and conduct atlatl accuracy contests. IASAC, ISAC, and Ohio locals. Friday afternoon to Sunday afternoon. Contact Ray Strisczek for more information, ( <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> ) (740) 331-4351.
July 16	Sugarloaf Preserve, Walnut Creek, <b>California</b>

	ISAC rounds, rabbitstick toss. Contact Ranger Bruce Weidman at (925) 943-5899 ext 2665.
July 16-17	Smoky Hollow Rendezvous. Cascade, <b>Wisconsin</b> July 16 – Demo, ISAC, Hunter’s Round July 17 – ISAC only For more information contact; Lenny Riemersma at <a href="mailto:lenmaryr@excel.net">lenmaryr@excel.net</a> (920) 528-7454
July 19-22	Willamette Mission Park, Salem, <b>Oregon</b> Take I-5 to exit 263 and follow the signs. Contact Terry Kramer at (503) 399-1964
July 21-24	The Atlatl Rattle at Green Flats, Casa De Fumo, Hancock, <b>New York</b> ISAC, Local, NY events, more. Contact Gary (570) 437-3698, <a href="mailto:iam@indian-artifacts.net">iam@indian-artifacts.net</a>
July 30	Demo, ISAC, Prairie Festival ,at U.W.C. Fond du Lac, <b>Wisconsin</b> For more information contact; Lenny Riemersma at <a href="mailto:lenmaryr@excel.net">lenmaryr@excel.net</a> (920) 528-7454
July 30	Linesville (x-Saegertown) <b>Pennsylvania</b> Artifact/Fossil Show and Atlatl Event. ISAC, Local. Contact Gary (570) 437-3698, <a href="mailto:iam@indian-artifacts.net">iam@indian-artifacts.net</a>
Aug. 12	That Dam ISAC, Albany <b>Ohio</b> Friday evening on pond dam at Steve's house near Albany. Contact Steve Barnett <a href="mailto:barnz@juno.com">barnz@juno.com</a> (740) 698-6553 or Ray Striscek <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> (740) 331-4351
Aug. 13-14	12th Annual Albany <b>Ohio</b> Atlatl Contests, Albany Riding Club, corner of Ohio State Route's 32 and 681. ISAC, IASAC and Ohio Atlatl Association local events. Contact Steve Barnett <a href="mailto:barnz@juno.com">barnz@juno.com</a> (740) 698-6553 or Ray Striscek <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> (740) 331-4351
Aug. 13	Ancient Ways at Sugarloaf Preserve, Walnut Creek, <b>California</b> Atlatl competition comes to Sugarloaf. Our third year of ISAC contests. Atlatl field rounds will also be scheduled. Other happenings: rabbitstick toss, hoop and spear, make and spin an acorn top, tule crafts, displays, flintknapping, stick dice. Make a wooden necklace using only primitive tools, and more. Contact Ranger Bruce Weidman at (925) 943-5899 ext 2665.
August 13-14	Hot Blanket atl atl throw & ISAC. Cheyenne, <b>Wyoming</b> Open to all, equipment and instruction cheerfully provided. Sponsored by the Wyoming Atlatl and Social Club. Contact: Gary/Regina Dodson <a href="mailto:wyouwinds@aol.com">wyouwinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclow@aol.com">coyoteclow@aol.com</a> (307) 772-0550 for location and time.
August 18-20	Bois Blanc Island, <b>Michigan</b> ISAC at 7 p.m. each day Great Lakes Primitives Traditional Arts Gathering Contact Jim Gilligan, <a href="mailto:wildernessjimgilligan@gmail.com">wildernessjimgilligan@gmail.com</a> (810) 599-6881
Aug. 25-28	Stone Tool Craftsman Show (Aug 27 & 28 10:00 am to 5:00 pm) Highbanks Recreation Area, north end of Letchworth State Park - Castile, <b>New York</b> 23rd Annual Eastern Seaboard Atlatl Competition (State Round, Closest-to-Pin, Distance) Aug 25, 26 & 27. ISAC, Hoop Toss, New York Atlatl Association Contests (National & International), Throw Over the Gorge Qualifiers & wooded Animal Round all four days. Handicapped Mammoth Hunt (Saturday); Long Distance Accuracy and Atlatl Battle (Sunday). New York Atlatl Association, Inc. insured event. Stone Tool Show contact: Dana & Kay Klein (585) 968-1577. Atlatl Competition contact: Douglas Bassett (585) 493-3625.
Sept. 2-4	Flint Ridge Lithic Society Knap-in. Flint Ridge State Park near Brownsville <b>Ohio</b> ISAC, IASAC and Ohio Atlatl Association local events. Contact Steve Barnett <a href="mailto:barnz@juno.com">barnz@juno.com</a> (740) 698-6553 or Ray Striscek <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> (740) 331-4351
Sept. 2-4	Mattoon Rendezvous, Mattoon, <b>Wisconsin</b> Various competitions, ISAC Contact Lenny Riemersma at <a href="mailto:lenmaryr@excel.net">lenmaryr@excel.net</a> (920) 528-7454
Sept. 3	Atlatl event and Antique Firearm & Indian Artifact Show Jefferson County Fair Grounds, Brookville, <b>Pennsylvania</b> Interstate 80, Exit 81, 1/4 mile north of the exit. 9:00 to 4:00 PM Contact George Miller (814) 590-6462 or <a href="mailto:gmmiller@brockwaytv.com">gmmiller@brockwaytv.com</a>
Sept. 8-10	Game & Fish Expo atl atl hunt and ISAC. Casper, <b>Wyoming</b> A major outdoor education exposition, a great family event. Open to all, equipment and instruction cheerfully provided. Contact: Gary/Regina Dodson <a href="mailto:wyouwinds@aol.com">wyouwinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclow@aol.com">coyoteclow@aol.com</a> (307) 772-0550.
Sept. 9-11	389 Simkin Road Elmira, <b>New York</b> Tyoga Atlatl Association event. ISAC, Mastodon Open and NYAA. (Team, Individual, Hunter, Distance and European) New York Atlatl Association, Inc. sponsored and Insured. Contact: Jack Rowe (570) 888-8258 <a href="mailto:rjrowe93@gmail.com">rjrowe93@gmail.com</a> or Tom Goble; (607)215-9405
Sept. 9-11	Cahokia Mounds, Atlatl event at Cahokia Mounds World Heritage Site, Collinsville, <b>Illinois</b> ISAC all 3 days w/European and other contests on Saturday Contact Jon Wood (573) 881-6622 <a href="mailto:jswood@mcmsys.com">jswood@mcmsys.com</a> or Ron Mertz (314) 628-9376 <a href="mailto:devoemertz@sbcglobal.net">devoemertz@sbcglobal.net</a>
Sept. 16-17	Fall Osage Knap-In Boonville, <b>Missouri</b> I-70 exit 111, ISAC both days. Contact Jon Wood (573) 881-6622 <a href="mailto:jswood@mcmsys.com">jswood@mcmsys.com</a> or Ron Mertz (314) 628-9376 <a href="mailto:devoemertz@sbcglobal.net">devoemertz@sbcglobal.net</a>
Sept. 16-18	13th Annual Ohio Pawpaw Festival. Lake Snowden, St. Rt. 32 Albany, <b>Ohio</b> . <a href="http://www.pawpawfest.com">www.pawpawfest.com</a> ISAC, IASAC and

	Ohio Atlatl Association local events. Contact Steve Barnett <a href="mailto:barnz@juno.com">barnz@juno.com</a> (740) 698-6553 or Ray Strischek <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> (740) 331-4351
Sept. 16-18	Letchworth State Park – Castile, <b>New York</b> ISAC (Fri 4pm-Sun 4pm) and local events except during Heritage Day noted below. NYAA fully insured event. "Native American Heritage Day" 10am - 4pm on Sat, Sept 18, with Native American Dance, Crafts and Food. Nearby camping, cabins and lodging available. Call Douglas Bassett (585) 493-3625 for information.
Sept. 23-24	Atlatl demonstrations and competitions, including ISAC in conjunction With Bois D'Arc Primitive Skills Camp and Knap-In, Hulston Mill Historic Park near Greenfield, <b>Missouri</b> Contact: Ray Madden – <a href="mailto:rhmadden@hotmail.com">rhmadden@hotmail.com</a> ; (417) 781-0962 or Bo Brown (417) 840-1615 or boisdarc.info
Sept. 23-25	Old Stone Fort, Manchester, <b>Tennessee</b> Fall Knap-In, ISAC each day Contact Keith Wimberley (931)723-5073 or <a href="mailto:Keith.Wimberley@tn.gov">Keith.Wimberley@tn.gov</a>
Sept. 24-25	Cool Blanket atlatl throw & ISAC. Cheyenne, <b>Wyoming</b> Open to all, equipment and instruction cheerfully provided. Sponsored by the Wyoming Atlatl and Social Club. Contact: Gary/Regina Dodson <a href="mailto:wyowinds@aol.com">wyowinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclow@aol.com">coyoteclow@aol.com</a> (307) 772-0550 for location and time.
Sept. 24-25	Smoky Hollow Rendezvous. Cascade, <b>Wisconsin</b> Sept. 24 – Demo, ISAC, Hunter's Round Sept. 25 – ISAC only For more information contact; Lenny Riemersma at <a href="mailto:lenmaryr@excel.net">lenmaryr@excel.net</a> (920) 528-7454
Oct. 1-2	New England Atlatl Day, Hammonasset Beach State Park, Madison <b>Connecticut</b> Co-Sponsored by the Fiends Of Hammonasset and the Ct State Museum of Natural History/Ct Archaeology Center. ISAC, Woolly Mammoth Hunt and Native American Festival. Saturday and Sunday. 10:00-3:00 Contact Gary Nolf 860-575-4263 <a href="mailto:gnolf@comcast.net">gnolf@comcast.net</a>
Oct. 7-9	Hocking Hills PowWow (aka Chief Logan PowWow) at Hocking Hills Hocking Hills Farmer's Market, US 33 & SR 374, Rockbridge, <b>Ohio</b> 43149. OAA will provide instruction and conduct atlatl accuracy contests. IASAC, ISAC, and Ohio locals. Lots of booths, crafts, food and information. Contact Ray Strischek for more information, ( <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> ) (740) 331-4351
Oct. 8-9	Falling Blanket atlatl throw & ISAC. Cheyenne, <b>Wyoming</b> Open to all, equipment and instruction cheerfully provided. Sponsored by the Wyoming Atlatl and Social Club. Contact: Gary/Regina Dodson <a href="mailto:wyowinds@aol.com">wyowinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclow@aol.com">coyoteclow@aol.com</a> (307) 772-0550 for location and time.
Oct. 8-9	Annual Candor Fall Festival Atlatl Contests and Demonstrations at Side Hill Acres Goat Farm, Route 96, Candor, <b>New York</b> 10 a.m. to 4 p.m. both days. ISAC and local contests and demonstrations. For further information contact Bob or Cheryl Berg at 1-800-836-4520 or <a href="mailto:Thunderbirdatlatl@gmail.com">Thunderbirdatlatl@gmail.com</a>
Oct. 22	Sportsman's Club, Dundee, <b>Wisconsin</b> ISAC, Hunter's Round, 3-D Targets For more information contact; Lenny Riemersma at <a href="mailto:lenmaryr@excel.net">lenmaryr@excel.net</a> (920) 528-7454
Oct. 28-29	Zaleski State Forest, Lake Hope State Park ROAR days. <b>Ohio</b> ISAC, IASAC and Ohio Atlatl Association local events. Contact Steve Barnett <a href="mailto:barnz@juno.com">barnz@juno.com</a> (740) 698-6553 or Ray Strischek <a href="mailto:ohioatlatl@hotmail.com">ohioatlatl@hotmail.com</a> (740) 331-4351
Oct. 29	The Great Pumpkin Atlatl Throw, 10 am – 4 pm Wickiup Hills Outdoor Learning Center, Toddville, <b>Iowa</b> (just north of Cedar Rapids, IA). For more information please contact Mark L. Anderson at (319) 384-0998 or <a href="mailto:mark-l-anderson@uiowa.edu">mark-l-anderson@uiowa.edu</a>
Nov. 5-6	Frosty Blanket atlatl throw & ISAC. Cheyenne, <b>Wyoming</b> Open to all, equipment and instruction cheerfully provided. Sponsored by the Wyoming Atlatl and Social Club. Contact: Gary/Regina Dodson <a href="mailto:wyowinds@aol.com">wyowinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclow@aol.com">coyoteclow@aol.com</a> (307) 772-0550 for location and time.
Nov. 26-27	Last Chance throw. Cheyenne, <b>Wyoming</b> Open to all, equipment and instruction cheerfully provided. Sponsored by the Wyoming Atlatl and Social Club. Contact: Gary/Regina Dodson <a href="mailto:wyowinds@aol.com">wyowinds@aol.com</a> (307) 632-0766 or Russell Richard <a href="mailto:coyoteclow@aol.com">coyoteclow@aol.com</a> (307) 772-0550 for location and time.

#### Philippines Atlatl Competition Events for 2011

May 28	Ifugao Tukab and Atlatl Association, Ifugao State University, Nayon, Lamut, Ifugao, <b>Philippines</b> 9:00 AM to 4:00 PM, ISAC Contact Samson Cabbigat, Pasnakan, Banaue, 3601 Ifugao, Philippines
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#### UK Atlatl Competition Events for 2011

Feb. 6	Oast Farm, Buxted, <b>Sussex</b> Contact Neal Matheson at <a href="mailto:spearthroweruk@googlemail.com">spearthroweruk@googlemail.com</a>
April 24	Oast Farm, Buxted, <b>Sussex</b> Contact Neal Matheson at <a href="mailto:spearthroweruk@googlemail.com">spearthroweruk@googlemail.com</a>
May 14-15	Magna Carta field archery club in Chertsey, <b>Surrey</b> A weekend event of spearthrowing, primitive skills, and a primitive archery competition. ISAC on the Saturday. Contact

	Wally Robson at <a href="mailto:wally_robson@yahoo.co.uk">wally_robson@yahoo.co.uk</a>
June 4	World Atlatl Day, Dawn Wood Junction Road, Staplecross Robertsbridge East Sussex Please contact <a href="mailto:steved@sky.com">steved@sky.com</a>

### Championnat d'Europe de tir aux armes préhistoriques 2011

Date	épreuve	pays	Département	E-mail	ISAC	responsable ISAC
30avril-1er mai	<b>Ramioul (B)</b>	Liège	Belgique	<a href="mailto:christian.lepers@swde.be">christian.lepers@swde.be</a>	ISAC Sunday	<a href="mailto:christian.lepers@swde.be">christian.lepers@swde.be</a>
30 avril – 1er mai	<b>ISAC Mas d’Azil (F)</b>	Ariège (09)	France	<a href="mailto:claus.sauer@wanadoo.fr">claus.sauer@wanadoo.fr</a>	ISAC Saturday 30 & Sunday 01	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
07-08 mai	<b>Crepy-en-Valois (F)</b>	Oise-Picardie	France	<a href="mailto:musee-mairie-crepy-en-valois@wanadoo.fr">musee-mairie-crepy-en-valois@wanadoo.fr</a> ; <a href="mailto:laurent.scart@sfr.fr">laurent.scart@sfr.fr</a>		
21-22 mai	<b>Castermerle (F)</b>	Dordogne	France	<a href="mailto:laurentbernat@wanadoo.fr">laurentbernat@wanadoo.fr</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
04-05 juin	<b>Chilhac (F)</b>	Haute Loire	France	<a href="mailto:jamon.peat@orange.fr">jamon.peat@orange.fr</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
10 juin	<b>Tautavel ISAC for Young</b>	Pyrénées orientales	France	<a href="mailto:conservateur@tautavel.com">conservateur@tautavel.com</a>	Young ISAC 10 June	<a href="mailto:j.pernaud@wanadoo.fr">j.pernaud@wanadoo.fr</a>
11-12 juin	<b>Val de Poix st Hubert (B)</b>	Luxembourg	Belgique	<a href="mailto:michel.laurent@saint-hubert.be">michel.laurent@saint-hubert.be</a> ; <a href="mailto:WBCC@skynet.be">WBCC@skynet.be</a>	ISAC Sunday	<a href="mailto:christian.lepers@swde.be">christian.lepers@swde.be</a>
11-12 juin	<b>Tautavel (F)</b>	Pyrénées orientales	France	<a href="mailto:conservateur@tautavel.com">conservateur@tautavel.com</a>	ISAC Saturday & Sunday	<a href="mailto:j.pernaud@wanadoo.fr">j.pernaud@wanadoo.fr</a>
18-19 juin	<b>Paleosite st Césaire (F)</b>	Charente maritime	France	<a href="mailto:v.teilhol@paleosite.fr">v.teilhol@paleosite.fr</a>	ISAC Sunday	<a href="mailto:v.teilhol@paleosite.fr">v.teilhol@paleosite.fr</a>
18-19 juin	<b>Etiolles (F)</b>	Essone	France	<a href="mailto:ebrunet@cg91.fr">ebrunet@cg91.fr</a>		
18-19 juin	<b>Arino (E)</b>	Teruel	Espagne	<a href="mailto:eva@birrus.com">eva@birrus.com</a>		
22 juin	<b>Tautavel ISAC for Young</b>	Pyrénées orientales	France	<a href="mailto:conservateur@tautavel.com">conservateur@tautavel.com</a>	Young ISAC 22 June	<a href="mailto:j.pernaud@wanadoo.fr">j.pernaud@wanadoo.fr</a>
25-26 juin	<b>Château neuf du Rhône (F)</b>	Drome	France	<a href="mailto:Cetienne5717@orange.fr">Cetienne5717@orange.fr</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
02-03 juillet	<b>Gross Gerau (D)</b>	Hessen	Allemagne	<a href="mailto:w.mueller1959@t-online.de">w.mueller1959@t-online.de</a>	ISAC Sunday	<a href="mailto:w.mueller1959@t-online.de">w.mueller1959@t-online.de</a>
02-03 juillet	<b>Quinson (F)</b>	Alpes de hte provence	France	<a href="mailto:prehistotir@gmail.com">prehistotir@gmail.com</a> ; <a href="mailto:ismael136@hotmail.com">ismael136@hotmail.com</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
06-07 juillet	<b>Nice (F)</b>	Alpes maritimes	France	<a href="mailto:prehistotir@gmail.com">prehistotir@gmail.com</a> ; <a href="mailto:ismael136@hotmail.com">ismael136@hotmail.com</a>		
09-10 juillet	<b>Tende (F)</b>	Alpes maritimes	France	<a href="mailto:prehistotir@gmail.com">prehistotir@gmail.com</a> ; <a href="mailto:ismael136@hotmail.com">ismael136@hotmail.com</a>		

## WANTED: New WAA Newsletter Editor.

A new Editor is needed. If you are interested in this volunteer job, please contact

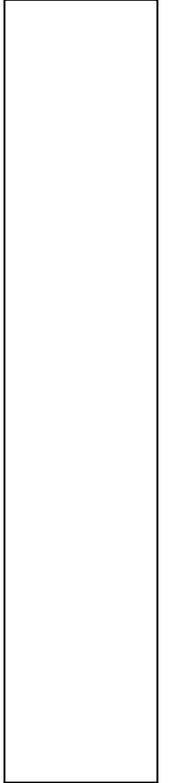
WAA President, Leonard Piemersma, home phone # (920) 528-7454, cell # (920) 917-0335 or email address [lemary@excel.net](mailto:lemary@excel.net)

16-17 juillet	<b>Vallon Pont d'Arc (F)</b>	Ardèche	France	<a href="mailto:prehistotir@gmail.com">prehistotir@gmail.com</a> ; <a href="mailto:ismael136@hotmail.com">ismael136@hotmail.com</a>		
23-24 juillet	<b>Collazza (I)</b>		Italie	<a href="mailto:macbran@branart.com">macbran@branart.com</a> ; <a href="mailto:macbran@sagittabarbarica.org">macbran@sagittabarbarica.org</a>	ISAC Sunday	<a href="mailto:christian.foppa@tele2.ch">christian.foppa@tele2.ch</a>
30-31 juillet	<b>Boario (I)</b>	Trentino	Italie	<a href="mailto:direzione@arceopark.net">direzione@arceopark.net</a>	ISAC Sunday	<a href="mailto:christian.foppa@tele2.ch">christian.foppa@tele2.ch</a>
30-31 juillet	<b>La chapelle aux saints (F)</b>	Corrèze (19)	France	<a href="mailto:casap@neandertal-musee.org">casap@neandertal-musee.org</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
06-07 août	<b>Mas d'Azil (F)</b>	Ariège (09)	France	<a href="mailto:claus.sauer@wanadoo.fr">claus.sauer@wanadoo.fr</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
13-14 août	<b>Bruniquel (F)</b>	Tarn et Garonne (82)	France	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
20-21 août	<b>Historial de Vendée (F)</b>	Vendée	France	<a href="mailto:Arcbillebaude@aol.com">Arcbillebaude@aol.com</a>	ISAC Saturday & Sunday	<a href="mailto:mere.terre@wanadoo.fr">mere.terre@wanadoo.fr</a>
20-21 août	<b>Teverga (E)</b>		Espagne	<a href="mailto:parquedelaprehistoria@recrea.asturias.es">parquedelaprehistoria@recrea.asturias.es</a>		
10-11 septembre	<b>Gletterens (CH)</b>	Fribourg	Suisse	<a href="mailto:daeberhard@village-lacustre.ch">daeberhard@village-lacustre.ch</a>		
17-18 septembre	<b>Zonhoven (B)</b>	Limburg	Belgique	<a href="mailto:guido.pirotte@zonhoven.be">guido.pirotte@zonhoven.be</a>	ISAC Sunday	<a href="mailto:christian.lepers@swde.be">christian.lepers@swde.be</a>
17-18 septembre	<b>Bad Buchau (D)</b>		Allemagne	<a href="mailto:christian.foppa@tele2.ch">christian.foppa@tele2.ch</a>	ISAC Sunday	<a href="mailto:christian.foppa@tele2.ch">christian.foppa@tele2.ch</a>
17-18 septembre	<b>Ibeas de Juarros (E)</b>	Burgos	Espagne	<a href="mailto:eduardo@visitasatapuerca.com">eduardo@visitasatapuerca.com</a>		
24-25 septembre	<b>Marpent (F)</b>	Nord	France	<a href="mailto:jeanpierreguerlus@hotmail.com">jeanpierreguerlus@hotmail.com</a>	ISAC Sunday	<a href="mailto:christian.lepers@swde.be">christian.lepers@swde.be</a>
08-09 octobre	<b>Pinar (E)</b>	Granada	Espagne	<a href="mailto:celemartinez68@hotmail.com">celemartinez68@hotmail.com</a>		
29-30 octobre	<b>Neuilly sur Marne (F)</b>	Seine-St-Denis	France	<a href="mailto:dlaporal@cg93.fr">dlaporal@cg93.fr</a>		
03-04 décembre	<b>Auneau (F)</b>	Eur et Loire	France	<a href="mailto:fabrice.brutus@wanadoo.fr">fabrice.brutus@wanadoo.fr</a> ; <a href="mailto:fabrice.brutus@inrap.fr">fabrice.brutus@inrap.fr</a>		



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get it  
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Practice  
until you  
can't get it  
wrong.  
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*Unknown*



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[worldatlatl.org](http://worldatlatl.org)