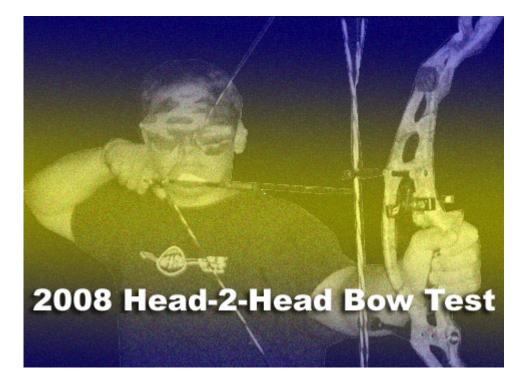


The Nation's Leading Bowhunting Website!



## By Jon E. Silks, Silksoutdoors.com

#### Table of Contents

About the Head-2-Head Bow Test	2
Introduction	2
Prologue	2
Individual Categories	
2008 Voting and Test Procedure	
2008 Individual Bow Specs	7
Results	
Subjective Individual Category Scores	
Balance/Feel:	
Draw Cycle:	
Shot Noise (Lack of):	
Shock/Vibration (Lack of):	
Speed Results	
2008 Final Results - Top 5	
The 2008 Overall Score for Speed + Subjective Categories	
The 2008 Combined Score for Subjective Categories	
Bow Evaluation Commentary	
People and Companies who made this possible	
2008 Evaluation Team	
Test Sponsors and Friends	
About Bowsite.com	

# **About the Head-2-Head Bow Test**

# **Introduction**

Welcome to the 2008 Head2Head Bow Test. This is our 6<sup>th</sup> year and once again we have changed things up a bit. In past years we have ranked all of the bows from 1<sup>st</sup> through 9<sup>th</sup> (8<sup>th</sup> the first few years) using various methods. We started out with sort of a bracketed tournament type test and moved into a complete 1<sup>st</sup> to last elimination in the last few years. I think the full elimination method is the best and will stick to it, however, I have decided to only post the top five for each category and overall results. I know some of you may be disappointed with this change but I'd ask you to consider things from the manufacturer's point of view. They work very hard to produce the best bows possible and coming in 9<sup>th</sup> place of 9 bows hurts. In past years I tried to explain to you, the reader, and to the manufacturers that 9<sup>th</sup> place isn't a bad thing when you consider these are probably the best 9 bows in the business. Still, I struggled with it and in the end decided that it will be better for everyone if only the top five are posted. Every bow made it into the top five in at least one category and all were a pleasure to shoot. These are all quality bows worthy of a first-hand look should you be in the market for a new rig.

Another change for 2008 is that we have gone back to a simple approach by eliminating one of the tests we have performed in the past – the Sound Level Meter (SLM) test. That particular test seemed to confuse more people than it informed and in the end it was not included into the overall results anyway. So, while I still rented the CEL 490 and did some testing with it I did not conduct a full test and decided to eliminate that portion of the test. In the end we are left with what we started out with 6 years ago – a subjective blindfolded test and a speed test. The subjective results will be posted by category and then they will be coupled with the speed test for an overall result. How these tests were performed, in detail, can be found in a special section devoted to methodology.

# Prologue

For those that are new to the H2H let me explain how bows are selected for the test. A thread is started here on Bowsite.com's main Big Game Forum in which everyone is encouraged to register their single vote for the bow they want to see entered into the test. Only one vote per archer was accepted (as far as we know anyway) and only one bow per company was permitted entry into the test.

The most votes came in for the following rigs:

- Elite GTO
- Mathews DXT
- Hoyt Katera
- Bowtech General
- Bear Truth II
- Parker Blackhawk
- LimbSaver DeadZone
- PSE X Force Dream Season

It has now become a tradition to enter one wild card into the H2H. It is my chance to select a bow that I believe would interest readers and provide some additional flavor to the test. This year's wildcard:

• Pearson TX4

The whole idea behind the H2H is to (as best we know how) evaluate the **SUBJECTIVE** qualities of 9 bows – head to head. Many archers select a bow based on subjective traits such as the kick/vibration at the shot, how smooth it is on the draw, etc. A bow that is easy to draw, quiet, and generally shock free at the shot will many times win out over one that displays harsher characteristics. There is one **OBJECTIVE** factor that seems to come into play fairly often for those selecting their next bow – speed. For that reason we tested the IBO speed of each bow and used the results as part of our overall results.

The validity of the H2H subjective results lies with the method of testing – blindfolded archers evaluating bows without regard to brand or looks. We followed last year's strict rule in keeping the identity of the bows hidden until an evaluator had completed the entire test. And it works! Every year some of the evaluators try to guess the bow that they are holding and while they occasionally get it right they much more often get it wrong. Throughout the test we (me and the folks who help with the test) share a snicker under our breath when guys insist they are holding a bow that is hanging on the rack behind them. Understand, these bows are being shuffled in and out of the testers' hands very quickly and from their perspective it is pitch black under the blindfold.

Although I will include my personal opinion about the bows in their individual write-ups the results are based solely on the eight evaluators and their selections in each category.

Jon E. Silks - Silks Outdoors

# Individual Categories

#### Noise Level:

One of the most sought after hunting bow characteristics is a low level of noise generated at the release. It has become a market obsession and the manufacturers have responded with parallel limbs, vibration dampening accessories of every sort and various machining features. Hunting rigs today are far quieter right out of the box than those just five years ago fully loaded.

For this portion of the evaluation each tester was asked to sit in a different location and orientation related to the shooter's position. Their backs were turned to hide the identity of the bows.

#### Kick/Vibration:

A special challenge exists with this category in that the evaluator has to concentrate extremely hard to separate the noise heard in their ears with the sensation felt in their hands. Many times when a bow produces a significant level of noise we mentally transfer that sound to our perception of the shock and vibration. The two do not always go hand in hand however. To help reduce the effects of this phenomenon the evaluators were asked to wear earplugs during the test.

#### Draw Cycle:

The draw cycle of a bow plays a major role in our perceived enjoyment of shooting. It also keeps us going back to the practice range more often if we like shooting a particular bow.

#### Balance/Feel:

The manner in which the grip of a bow naturally positions your hand and wrist is an important factor in attaining accuracy. Also, the feel of a bow in your hands can seriously affect your decision to buy a certain rig. A bow that meets your needs in some areas but feels like a block in your hand will likely be left on the shelf.

# 2008 Voting and Test Procedure

For 2008 we included bows in our annual Head2Head test through a voting process. There were eight slots up for grabs. The poll conducted here on **Bowsite.Com** was conducted in the same manner as last year – that is, voters not only chose the manufacturer but they also chose the model to be tested.

Subjective tests were conducted with each bow set to a 28" draw length and 65 pound draw weight. The shorter draw length and reduced draw weight (compared to our speed testing) was used because it is easier to find shooters with a 28" draw length and also helps them be able to get through the testing without hurting their shoulders.

Each evaluator worked separately through all four categories. A blindfold was used to keep brand loyalty at bay and was worn from the beginning to the end of each session (noise, kick, etc.). Evaluators were not permitted to see the bows until after they were done with their evaluation. Following is an example of how the testing was performed:

Example of the "draw cycle" category process: The evaluator is blindfolded. He is handed a bow to draw. The bow is handed back to the helper and the evaluator is given a second bow to draw. He then chooses between the two. The one that is not chosen as "best" between the two is put through the same process with the next bow in line. Both are drawn and one is chosen. Again, the one that is chosen is put up against the next bow in line. This process is continued until only a single bow remains. The bow that remains is the evaluator's #1 pick for that category. That bow is taken out of the testing. The entire process is completed again for the remaining seven bows until only one remains – the evaluator's #2 overall pick for that category. This process is repeated until all 8 bows (9 with the wild card) have been placed/ranked.

Each evaluator's results are then scored. This was done by simply inverting the numbers of the rankings and rewarding points for each ranking. Just as an example we will rate the bows arbitrarily for draw cycle (this is just an example – not actual results):

- 1. PSE
- 2. Bear
- 3. Elite
- 4. Hoyt
- 5. Limb Saver
- 6. Parker
- 7. Pearson
- 8. Mathews

#### 9. Bowtech

The bows would then be given the following scores for one evaluator for the draw category:

- PSE 9 points
- Bear 8 points
- Elite- 7 points
- Hoyt 6 points
- Limb Saver 5 points
- Parker 4 points
- Pearson 3 points
- Mathews 2 points
- Bowtech 1 point

The points were totaled for all evaluators in each category. The bow with the highest number of total points in that category was rated #1 and so on down the line to #9. In this way we were able to get a true ranking for each category based on the results from all evaluators.

Speed is tested in the following manner:

- Just to make sure the bow is at least in the right ballpark the draw weight and draw length are roughly verified with a spring scale and a simple draw length arrow correlated to a mark on the shelf equaling the deepest part of the grip. This saves me a lot of time if the bow is not close to the right draw length or draw weight.
- Brace height is tested using calibrated dial calipers
- Install New Archery Products Quik Tune 3000 Arrow Rest
- Set nock point
- Verify draw weight using a calibrated digital force gauge backed up with the Easton Bow Force Mapper System handheld unit
- Verify draw length using my force draw system, which is a combination of a modified Apple Bow Drawing Machine, Chatillon force gauge, calibrated 36" steel rule and trammel point
- Mark cams at full draw
- Paper tune by hand
- Set bow on Spot Hogg's Hooter Shooter portable shooting machine draw to cam marks and fire through two chronographs Oehler and Easton. Both chronographs are equipped with indoor lighting kits.
- IBO speed is recorded from the average of 5 shots.

\*\*Note: Since the IBO speed rating is not an official specification. I want to clarify here what most consider to be the industry accepted set up for IBO speeds:

- Draw length: 30" +/- .25"
- Draw weight: 70 pounds +/- 1 pound
- 350 grain arrow

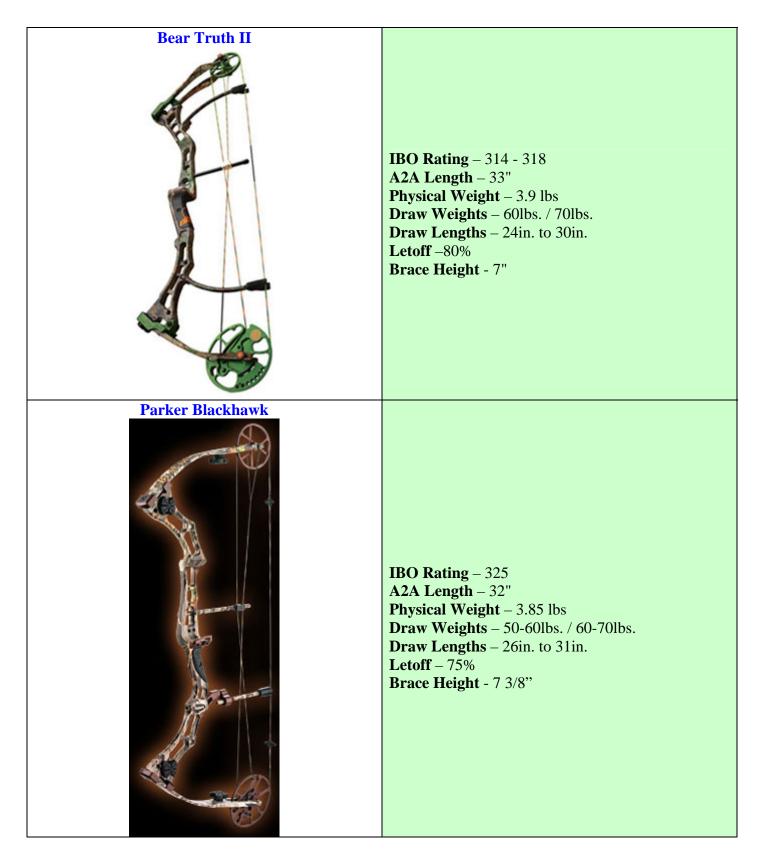
These numbers will vary depending on who is doing the testing and what equipment they are using. For instance, most bow shops that I have visited use a hanging spring scale, a draw length arrow and a 350-grain arrow. Many of the manufacturers have much more sophisticated equipment to do their testing. Also, where a manufacturer may use a tied-on string nock, a bare shaft, the least amount of letoff within their range, a bare string and a shooting machine to get their measurements, many bow shops and individuals may use a brass nock, fletched arrow, test with string silencers in place and shoot the bow by hand.

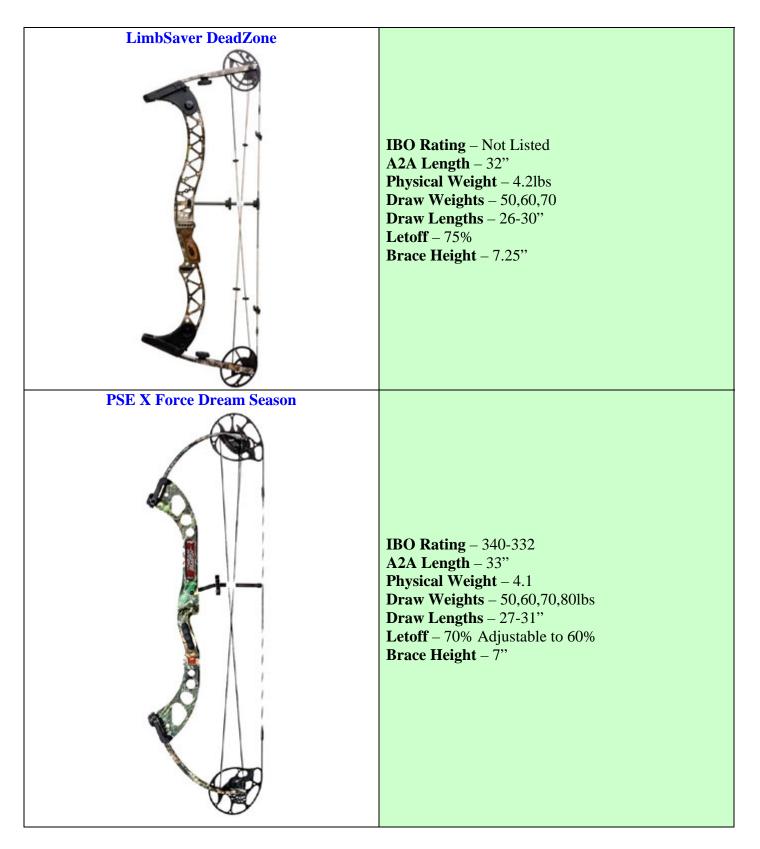
I also want to point out that if a bow does not meet the draw length spec, either short or long, I will contact the manufacturer and get a module that brings them into spec or just get another bow altogether. Strings and cables are not tweaked to bring a bow into spec. The same goes for a bow that has cams that are found to be out of "tune" – a term that is commonly used in referencing the timing, synchronization, etc of the bow's eccentric system. And, as it seems to happen most years, we need to go back to a manufacturer or two to get bows that actually reach the needed 70-pound draw weight. This year was no exception.

# 2008 Individual Bow Specs









Page 10 of 10



# **Results**

# Subjective Individual Category Scores

#### Balance/Feel:

- 1. Elite GTO Category Score: 59
- 2. Hoyt Katera Category Score: 56
- 3. PSE X Force Dream Season Category Score: 50
- 4. Mathews DXT Category Score: 49
- 5. Bowtech General Category Score: 47

#### Draw Cycle:

- 1. Hoyt Katera Category Score: 55
- 2. PSE X Force Dream Season Category Score: 54
- 3. Mathews DXT Category Score: 51
- 4. Bear Truth II Category Score: 50
- 5. Pearson TX4 Category Score: 46

#### Shot Noise (Lack of):

- 1. Bowtech General Category Score: 68
- 2. Pearson TX4 Category Score: 53
- 3. Mathews DXT Category Score: 43
- 4. Parker Blackhawk Category Score: 39
- 5. Bear Truth II Category Score: 38

#### Shock/Vibration (Lack of):

- 1. Bowtech General Category Score: 68
- 2. Mathews DXT Category Score: 56
- 3. Hoyt Katera Category Score: 54
- 4. Limb Saver DeadZone Category Score: 44
- 5. Elite GTO Category Score: 39

# Speed Results

(Rounded to the nearest whole number)

350-grain arrow

- 1. PSE X Force Dream Season 336 fps: Points earned: 72
- 2. Elite GTO 333 fps: Points earned: 64
- 3. Hoyt Katera 326 fps: Points earned: 56
- 4. Limb Saver 320 fps: Points earned: 48
- 5. Mathews 319 fps: Points earned: 40
- 6. Pearson TX4 317 fps: Points earned: 32
- 7. Parker Blackhawk 316 fps: Points earned: 24
- 8. Bear Truth II 314 fps: Points earned: 16
- 9. Bowtech General 306 fps: Points earned: 8

# **2008 Final Results - Top 5**

#### The 2008 Overall Score for Speed + Subjective Categories

- 1. Hoyt Katera: 188 + 56 = 244
- 2. Mathews DXT: 199 + 40 = 239
- 3. PSE Dream Season: 163 + 72 = 235
- 4. Elite GTO: 170 + 64 = 234
- 5. Bowtech General: 205 + 8 = 213

#### The 2008 Combined Score for Subjective Categories

- 1. Bowtech General Total Score: 205
- 2. Mathews DXT Total Score: 199
- 3. Hoyt Katera Total Score: 188
- 4. Elite GTO Total Score: 170
- 5. PSE X Force Dream Season Total Score: 163

# **Bow Evaluation Commentary**

Jon Silks Personal Bow commentary

#### **PSE X Force Dream Season:**

For the first time since the late 90s I will be shooting a PSE bow as my main rig for the season. The Dream Season has many of the characteristics I prefer in a bow coupled with incredible speed. For a speed bow it has a super smooth draw, just a little "jump" at the shot and is very quiet. Plus, the fact that it does all of that <u>and</u> unleashes a 350-grain arrow at 336 fps is quite impressive! The only thing I would change about the Dream Season is the grip and I think they have other options available. Not that their grip is bad – it isn't – just that I personally prefer something a slight bit fuller. The Dream Season made it into the top 5 in two categories (balance/feel and draw cycle) and also made the top five in the combined subjective results. A big win for PSE this year is that they improved their overall position (speed plus subjective categories) from 6 to #3 over last year!

#### Elite GTO:

I was impressed with the number of votes that the Elite GTO received in our online polling. I don't think we have ever had that many votes for a single bow before. The GTO is an all-around good performer. It has my favorite grip of the bunch as it cradles your hand with no noticeable ridges, bumps, etc to take away from the comfort. As you will see, the evaluators apparently felt the same way. Another Elite bonus is the speed it puts (333 fps IBO) out with minimal shock or vibration. The noise is average in my opinion when compared to the group but you have to remember that this is the cream of the crop so average here is still fantastic. The balance of the GTO (how well it steadies on the target at full draw) is also well above average. The draw cycle is aggressive (quick to peak – hold at peak for a relatively long distance) as you might expect but it is consistent/smooth (no abrupt changes throughout the cycle). The GTO made the top 5 in two categories and scored an impressive 4<sup>th</sup> place in the subjective combined tests and overall results.

#### **Bear Truth II:**

Bear's Truth II is a well-balanced rig at full draw. I am a fan of their grip and consider the draw cycle to be quite smooth. In fact it placed  $4^{th}$  in the draw cycle category, which is no surprise to me. It also hit the top five in the noise category and for good reason – it is definitely a quiet bow! While not the fastest bow in the group it is definitely no slouch either, spitting out IBO speeds registering 314 fps the Truth II has plenty of speed. The Truth II has a bit of a "jump" in the handle when the bow is shot – nothing alarming, but enough to keep it out of the top 5 in that category. Also, contrary to my view, it didn't hit the top 5 in the balance and feel category – that surprised me. Another plus for the Truth II is the price – it is in the 600s, which is still notably lower than some of the others. Bottom line, the Bear Truth II is a smart buy.

#### Mathews DXT:

Mathews continues their successful journey into the realm of light mass weight bows with the DXT. This bow is more impressive than last year's Drenalin in most respects and it is even lighter! I know that some people

think there are too many people that shoot a Mathews just because of the name, however, I would contend that it is hard to argue with anyone who chooses to shoot one. They are obviously well engineered and clear leaders in the industry. Bottom line is that they make bows that perform well. For a lightweight, short axle-to-axle bow it has surprising stability at full draw and also has one of my favorite grips of the bunch. I found the DXT to be super quiet, smooth drawing and almost without kick or vibration.

#### Limb Saver Dead Zone:

The Limb Saver DeadZone is a unique rig with much to offer. First and foremost for me is that it demonstrates minimal shock or vibration at the shot. In the subjective category for that characteristic it came in at a solid  $4^{th}$  place. The weight distribution created by the unique limb and pocket system is a big contributor to the steadiness the DeadZone displays at full draw. The bow's grip was perceived to be too bulky, which landed it short of  $5^{th}$  place in the balance/feel category. In my opinion the DeadZone had good performances in the draw cycle and shot noise areas, however, it did not make the top 5 in those categories. This is a solid showing for Limb Saver's first ever bow.

#### **Hoyt Katera:**

You would be hard pressed to find any bow on the market that matches the Katera in draw cycle. It is exceptionally smooth and at full draw the grip is comfortable and effective. At the shot very little is registered in the handle in terms of shock or vibration. The Katera landed one of the top three spots in three categories. Only the shot noise category found the Katera below 5<sup>th</sup> place. If I were to change anything about the Katera it would be to make it just a little lighter in mass weight. Hoyt's success at creating top-notch rigs is evident in their 3<sup>rd</sup> position in the combined subjective categories and the **number 1 spot overall**!! One of the most significant advantages of the Hoyt over some of its competitors is its across-the-board balance of characteristics. The bottom line is that it is flat out fun to shoot and we all know that the more you shoot the more familiar you get with your rig and in turn the more likely you are to be successful this Fall when the moment of truth arrives.

#### **Parker Blackhawk:**

Parker's Blackhawk made an immediate impression on me with its low mass weight and great looks. The camo pattern on this rig is striking. In terms of performance the Blackhawk had its best showing in the shot noise category coming in at number 4 - a result that is made more impressive by its light structure. I noted an average "jump" in the handle at the shot along with a small ridge under the shelf that may have landed it below #5 in the shock/vibration and balance/feel categories. I personally thought the Parker should have hit the top five in the draw cycle category and can only guess that it was the short valley that kept it from doing so. Another good bow from Parker.

#### **Pearson TX4:**

The lack of noise produced by Pearson's TX4 was remarkable – it was a bit of a surprise to me just how quiet it really was. People that make the lack of noise a high priority in their bow selection should be talking about the TX4. One shot will be enough to convince them that this is definitely one of the quietest bows on the market. There is an average "jump" in the handle at the shot and a small ridge under the shelf that most likely kept it out of the top 5 in the feel/balance and shock/vibration categories. Pearson did hit the top five in the draw cycle category and rightly so. For a fast bow the draw cycle is not too aggressive, as it has a gentle climb to peak followed by a smooth rollover to holding weight. Another TX4 quality is how well it clings to the target at full draw. Where some bows appear to fight you every step of the way while aiming the TX4 seems to draw you to the bull's-eye.

#### **Bowtech General:**

I can say without hesitation that this is the most shock free bow that I have ever shot. It not only doesn't move in your hand at the shot – it actually feels like it disappears for a second – like you aren't holding anything. The noise follows suit, as it is also amazingly quiet. Not surprisingly it won the shock/vibration and noise categories handily. While it didn't hit the top five in draw cycle it did make it in the feel/balance category. As the General was rated lowest of the 9 bows in IBO speed it gained only 8 points in that category and subsequently lost ground compared to the others in the top 5. The Bowtech captured the **number 1 position in the combined subjective tests** and 5<sup>th</sup> place overall (speed plus subjective).

# **People and Companies who made this possible**

# 2008 Evaluation Team

I cannot overstress the importance of the individuals that volunteer their time and hard work to make the H2H possible! This test takes many hours and a ton of involvement on everyone's part. This year we further changed the testing format to make it easier on the evaluators. In years past we would basically do the entire test in one session – an hours long grueling task. Last year we split the test up into 2 separate sessions making it much easier on the evaluators. This year we further divided things up by performing two sessions per night at Yoder's Archery – one archer per session. So, each archer only had to remain at the test facility for the length of time it took him to get through the test. This new system took the pressure off of everyone involved making the testing less rushed and more relaxed.

To all those listed below – **THANK YOU!** 

- **Bryan Fultz** This was Bryan's third year in performing the test. I generally do not allow repeat evaluators, however, Bryan and Todd (next on the list) are the exception. Bryan is a great friend and hunting partner. How could I not ask this man to be in the test during one of our Spring gobbler outings he took me to a section of his property loaded with morel mushrooms and said, "Have at it"! Have you ever eaten a Morel? Bryan also helped out with other portions of the test.
- **Todd Jodon** This is Todd's second year serving as an evaluator. Todd has become a very good friend over the past year. He has generously invited me and the kids on many hunts at his camp back in the mountain. I also appreciate Todd's "tell it like it is" approach to most everything. That quality comes through in his evaluations.
- The rest of the evaluators were previously unknown to me so I will simply share the basics:
  - **Lynford Kauffman** Age 21, has been shooting for 7 years, has hunted whitetail and elk, currently shoots a Mathews
  - **Chad Hostetler** Age 17, has been shooting for 5 years, has hunted whitetails and small game, currently shoots a Darton
  - **Ryan Silfies** Age 34, has been shooting since he was 6!, has hunted whitetails, currently shoots a Hoyt
  - **Randy Stahl** Age 29, has been shooting for 6 years, has hunted whitetails and turkey, currently shoots a Mathews
  - **Tim Alexander** Age 43, has been shooting for 33 years, has hunted many different game animals, currently shoots a PSE
  - **Keith Whistler** Age 42, not sure how long he has been shooting, has hunted whitetails, currently shoots a Ross

#### 2008 H2H Support Team:

As it has been in past years I have relied on several behind-the-scenes people to make this thing work. My main testing partner is my 12-year-old son Michael. He sticks with me through it all and loves every minute of it. He helped with every portion of the testing including the speed testing. Thanks Michael! My 15-year-old daughter Rachel also helped with one evening of the testing, which really made things go especially smooth that night – thanks Rachel! And again, I can't thank Bill Yoder enough. He helped out in every way he could and on top of that you wouldn't easily find many folks who are as mild mannered and pleasant as Bill – throw in a serious dose of passion for archery and you have one of the best pro shop owners I have ever met. Thanks again Bill!

# Test Sponsors and Friends

# **Special Thanks**

A very special **thank-you** is in order for these sponsors and friends!!

**Yoder's Archery** – Yoder's Archery owner Bill Yoder was kind enough to allow us to perform the 2008H2H Bow Test at his facility. Bill has a full service pro shop and video shooting system. Bill was also a huge help in conducting the actual test by shuffling bows and helping blindfolded archers hit their mark – a unique skill that Bill perfected by the end of the week!

**Jodon's Sporting Goods** – A special thanks to "Pickle" Jodon for allowing us to perform the speed testing at his indoor shooting lanes.

**Bowtech/Diamond Archery** for providing the Hostage Pro Arrow Rests used during the subjective portion of the H2H. These are great rests!

Easton Archery for providing their Bow Force Mapper System, Chronograph, Grain Scales and test-arrows

New Archery Products for providing QuikTune 3000 Arrow Rests for speed testing!

And of course, all of the manufacturers who provided the bows for testing!!!

# BOWSITE.com

Page 19 of 19

# **About Bowsite.com**

#### A family-friendly hunting site.

Since 1996 Bowsite.com has been a top communication, entertainment, and informational tool for Bowhunters. With a rich assortment of features, hunting reports, live hunts, photos, videos, and over 90 message forums Bowsite.com continues to provide hunters with a one-stop approach to the information they need within a clean and professionally designed site. Sponsored by over 100 companies and organizations, and visited by over 20,000 hunters a day The Bowsite.com continues to set the standard for bowhunting information on-line.

Bowsite.com is proud to produce this feature for the sixth year in a row. We hope you enjoyed this exclusive report and look forward to seeing you around the site!

