



Regardless of what your opinions are or what style bow you are shooting, the test will cover, both vertical bows and crossbows. Some day you might want to try a different style of archery.

What is your bow's draw weight?

- Vertical bows must be at least 35 pound peak draw weight

- Crossbows must be at least 75 lbs. draw weight



Minimum hunter ed requirements are the same for hunting

Marginal bows may be measured on scale at time of class

Label on riser usually gives you the range of draw weight and draw lengths for the bow

Check to make sure
that your bow is not
missing any E – Clips
on its axles.



Most bows have e – clips that hold the axle in place.

Bow is extremely dangerous and should not be shot if missing any of the e – clips.

Any bow missing an e-clip will not be allowed to shoot at the Hunter Ed live fire portion of the class



Check to make sure
your bow string is well
waxed and not frayed

Check for worn or
separated servings



Pay careful attention
around the outside of
your cams or eccentrics

Any bows with servings or strings damaged to the point where it is a safety issue will not be allowed to shoot at the Live Fire portion of the exam.



Check to make sure
that your peep sight
and nock points
aren't sliding.

To be as precise as possible the peep sight should not slide.

Check limbs for stress cracks

Any stress cracks can shatter bow in as little as one shot.



Any stress cracks or fractures on the bow limbs are extremely unsafe. Bow can not be shot and should be brought to pro-shop to be fixed.



Give the bow a tap and listen for any loose parts.

Often times a loose quiver or rest will cause a rattling sound.

It's more important to have a quiet bow over a quick bow

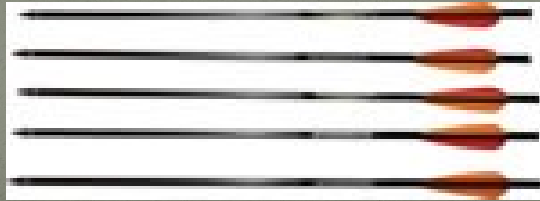
Make the bow as quiet as possible.

Any loose parts need to be addressed.

How many arrows do you have?

You must have at least 5 matched arrows

A manufacture's arrow sizing chart can be used to determine proper arrow spine



Same brand

Same weight

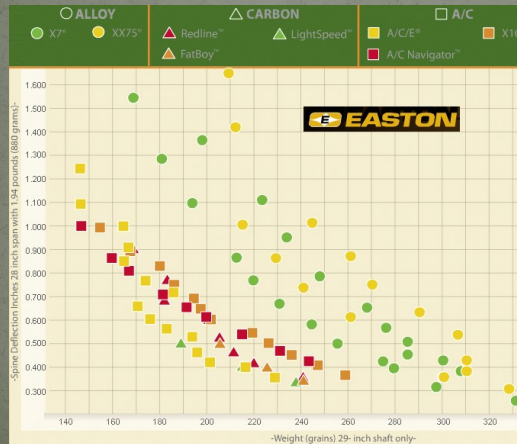
Same length

Same style nock

Same sized fletching

Matched Equipment

Use Local Pro-shop to Measure Your
Draw Length and Draw Weight



Look at Arrow
Sizing Chart

All Arrows
Need to be the
Same

Do you have matched equipment??

- Use local Pro-shop to measure your draw length and draw weight.
- Use arrow sizing chart to be sure you have proper arrow spine.
- Too heavy a shaft will effect accuracy
- Too light will be dangerous
- Wooden arrows cannot be used with compound or crossbows.
- Crossbow arrows – Check manufacture's directions for proper length and weight
- Each brand may have a different weight for the same length arrow. Need to be consistent.
- Be sure you have the correct style nock for your brand of crossbow. Wrong style nock can cause a dryfire.

Tons of Fletching Options



Tons of options.

Let the experts at the pro-shop steer you in the right direction. Certain styles of fletching work better with certain styles of rests.

Make sure all your arrows are fletched the same.

Important you have a quiet fletching for hunting.

Same length

Same weight

Same style fletching

Same weight points

Same style nocks



Example of impact from unmatched arrows

Importance of being matched.

Two crossbow arrows same length, but different brands, shoot totally different.

Perfect Practice = Perfect Shooting



How Many Reference Points Do you Have?

One needs to have perfect practice in order to achieve perfect results

Reference points

- Peep Site that doesn't move
- String touching nose
- String or kisser button touching corner of lip
- Drawing hand locked under cheek bone
- You might not have all of these reference points. The more points you use, the more consistent you will be.

What Type Targets Have You Been Practicing On?



Bullseye / Dot Targets



Animal Shaped Targets

What type targets have you been shooting at???

Bullseye Targets are great giving you a spot to concentrate at.

Before you go in the woods, you need to practice on deer shape targets.

Most Deer Don't Have a Bullseye Drawn on Them



Deer Don't have a Bullseye drawn on them.

Where do I aim?

Where Do I Aim Without a Bullseye?

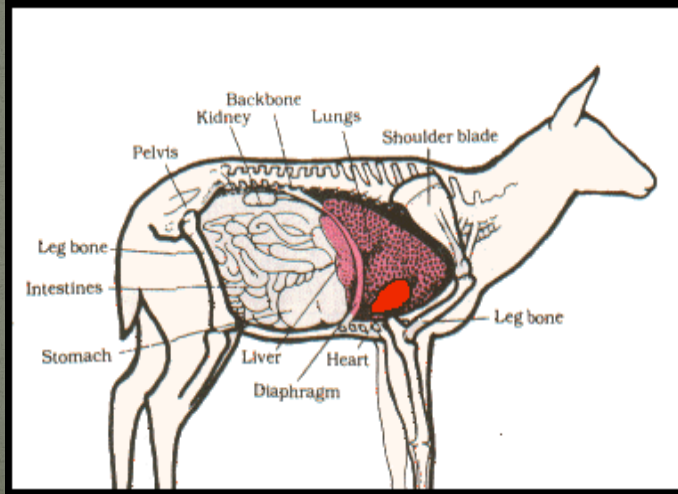


Without a bullseye, Where do I aim??

Where are the vitals that I should be concentrating on??

Need to focus on One Small Spot to aim at.

Aim For the Vital Zone



- Heart

- Lungs

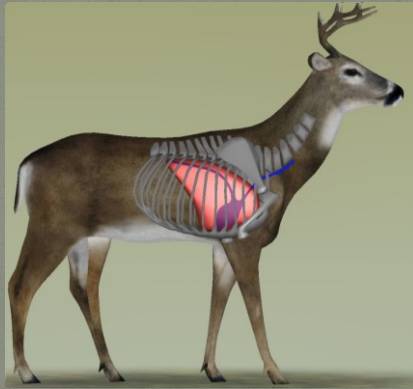
- Liver

Vitals I should be aiming at. Heart, Lungs, Liver

Deer needs to lose about a 1/3 of its blood from its arterial system to expire. This is about 30 oz from an average adult deer.

Broadside Shot

- Aim Slightly Behind Shoulder
- Wait for Lead Leg to be Extended



Broadside shot.

Pick a small spot slightly behind shoulder $\frac{1}{3}$ to $\frac{1}{2}$ way up from the lower chest

Wait for front leg to be extended.

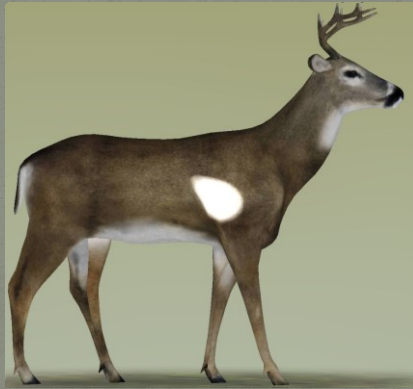
Concentrate on spot you are aiming. Find a crease in the skin, a tuft of hair, a discoloration in the fur – something to concentrate on.

Do not look at deer's antlers, eyes etc..... Focus on the vital zone

Notice deer in pix is still looking straight ahead. Does not know you are there.

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Quartering Away Shot

- Aim Further Back to Allow for Double Lung Shot
- Aim For Opposite Front Shoulder



Excellent shot if you know where to aim.

Deer isn't looking at you. Deer's field of view is about 300 degrees

Aim further back to allow for double lung shot.

Aim for opposite front shoulder

Depending upon how hard the deer is quartering determines how far back you need to aim.

How many lbs. draw weight do you need for hunting??

35 lbs. for vertical - 75 lbs. for crossbow..

35 lbs. might be a little light for hard quartering deer.

What type of broadhead are you shooting?

Some of the mechanical broadheads take too much energy to open up to successfully take a hard quartering shot.

If you aren't sure of your equipment, wait till the deer is less quartering.

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Shots NOT Recommended



Quartering To You

Quartering to you – Shoulder bone and brisket cover vitals. Liver and gut shot is not the shot you are looking for – NO SHOT

Shots NOT Recommended



Facing You

Facing you – Vitals completely covered – NO SHOT

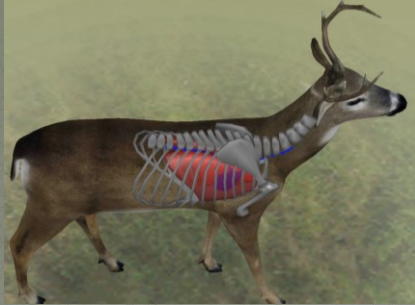
Shots NOT Recommended



Facing Away

Facing Away – No Vitals – NO SHOT

Shooting From Elevated Stand



- Bend at the Waist
- Aim Slightly Higher than Broadside
- Practice These Shots Wearing Your Harness

Shooting at Deer from Elevated Stand

Come to full draw then bend at the waste maintaining right angle between your arm and body.

If you just drop your arm without bending at your waste, you are actually shortening your draw length slightly, tremendously affecting arrow flight.

Practice these elevated shots while wearing your harness before the season.

In order to pick up both lungs you need to aim higher on the body than you would from a shot on level ground.

Shooting From Elevated Stand



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Shooting From Elevated Stand



- Straight Down = No Shot
- Too Close

Shooting at Deer from Elevated Stand

Shooting Straight Down

- Best shot is the double lung. Looking straight down you can only hit one lung.
- Therefore the only shot you have is a heart shot. The backbone is as wide the heart, making this shot nearly impossible.
- Breaking a deer's backbone on purpose is not humane or ethical
- Straight down shot = NO SHOT
- Wait for the deer to walk out 10-15 yards and turn broadside or quartering away.

Are These Good Shots ?



Deer Running



No Safe Backstop



Vitals Obstructed



Deer Bedded

Deer Running

- You'll have a hard enough time hitting a deer standing still. You should never shoot at a running deer. - NO SHOT

No Safe Backstop

- First deer may not stop your arrow. "Be sure of your target and beyond" - NO SHOT

Vitals Obstructed

- Need a very clear shot to the vitals. Other parts of the deer can be obstructed, but the vitals need to be wide open. – NO SHOT

Deer Bedded

- Vitals are covered by shoulder bone when deer is bedded. – NO SHOT

Are These Good Shots ?



Relaxed and Feeding



Head Obstructed / Clear Vitals



Facing Away



Front Leg Extended

Relaxed and Feeding

- Deer is calm, feeding and doesn't know you are there. GOOD SHOT

Head Obstructed / Clear Vitals

- Deer can't see you as you draw bow. GOOD SHOT
- * would need to have seen the deer's head before taking shot to confirm sex of deer

Facing Away

- Deer quartering away. Doesn't know you are there. GOOD SHOT
- * remember on quartering away shots from the treestand to aim slightly higher and further back than a broadside shot.

Front Leg Extended

- Deer is relaxed and feeding. Front leg extended has opened up clear shot to the vitals. - GOOD SHOT

Alert Deer – Is This a Good Shot?



- Need a Relaxed Deer
- Deer is Quicker than Your Bow
- Relaxed Deer Will Still want to Move.
- Need to Keep All Shots Within 20 Yards (Top Pin)
- No Different with Crossbows

Alert Deer = NO SHOT

Deer is quicker than your bow. Deer evolved as a prey animal and will react to the sound of your bow. Bow needs to be shooting quicker than 600 ft / second to outshoot the deer's reaction time. Fastest crossbow on the market are pushing 400 ft / second. This is still too slow to beat deer's reaction time

Relaxed deer will still want to move. The key is to have the deer close enough it doesn't have time to move. Deer should be 20 yards, tops!

All your shots in the woods should be shot with top pin within 20 yards.

Multiple pins are good for target shooting, but not needed for the woods.

Largest whitetails in North America as recorded by Pope and Young are shot on average around 20 yards.

Crossbows are no different. Need the deer relaxed and within 20 yards.

Field Point Vs. Broadhead

Which One Flies Better??



* Remember to use a broadhead wrench when installing broadheads

Which Point flies better – Field point vs Broadhead

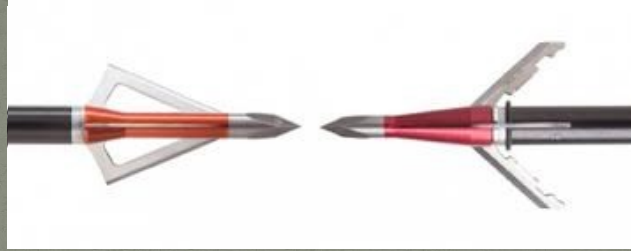
Don't know until you practice.

If your bow is tuned properly, the broadhead should shoot the same as your field point, at least at 20 yards....

Don't believe the packaging, that says "fly like a field point". Still need to practice.

To prevent self inflicted accidents while putting broadheads on, use a broadhead wrench.

Fixed Blade Vs. Mechanical



- Personal Preference
- You Still Need to Practice to Confirm Arrow Flight
- You Still Need to Hit Vitals

Fixed blade vs Mechanical

Is more a personal preference.

You still need to hit vital zone

You still need to practice to confirm arrow flight.

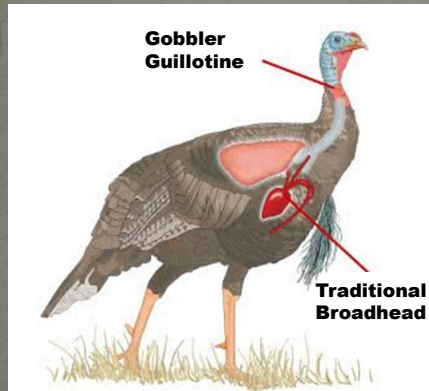
Many of the mechanical broadheads come with a practice broadhead.

Most mechanical broadheads are designed to be shot with bows 50 lbs or higher.

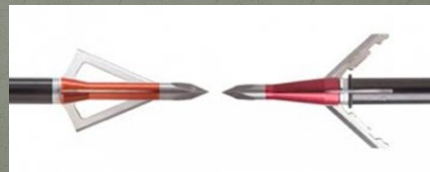
Broadheads need to be razor sharp before going in the woods. Shooting a broadhead into a target will dull it. Need to re-sharpen or switch blades before you go out in the woods.

What Else Can I Hunt Beside Deer?

Where do I Aim at a Turkey with a Bow?



Gobbler Guillotine



Traditional Broadhead

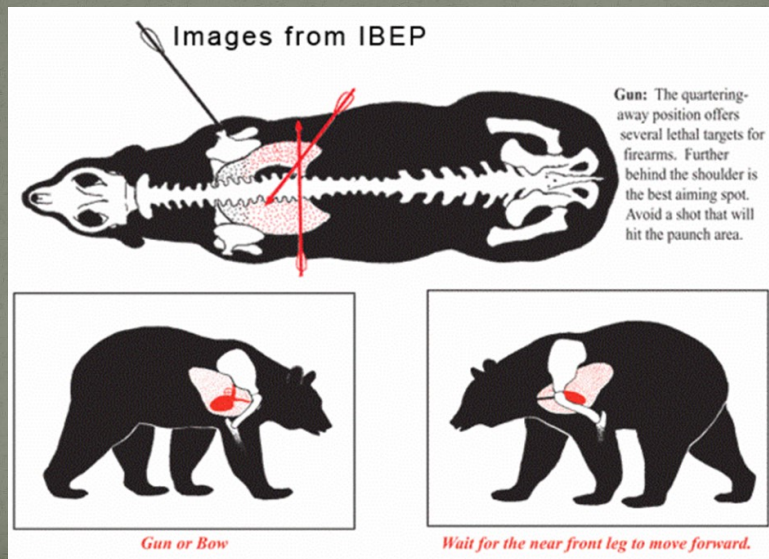
Can hunt Turkey with the bow.

Traditional broadheads. - Aim at the top of the thigh even with the top of the beard.

Turkey specific broadheads - Aim at the neck

Depending upon whether turkey is in full display or not will effect where you will need to aim

What Else Can I Hunt Beside Deer?



Bear

Season scheduled for October.

Bear have very heavy bones that can stop your arrow.

Bear needs to be broadside or slightly quartering away.

Wait until bear brings front leg forward to open up vital area better.

Bear has very long hair making it difficult to determine the edge of its body.

A properly placed arrow is very efficient in harvesting a bear. Keep your shots well within your effective range.

Bear hunting remains a controversial topic in NJ. Only the highest percentage shots within 20 yards should be taken.

What Else Can I Hunt Beside Deer?



Small Game



Judo Point / Small game



Flu-Flu Arrow

Small Game

Use Judo point.

For shots in the air

Use flu-flu arrows – Usually used with traditional bow equipment.

What Else Can I Hunt Beside Deer?



Need a Fishing License,
Not a Hunting License

Bow Fishing

Use bow fishing point.

All you need is a fishing license. No hunting license required.

Look at Freshwater Fishing Digest for regulations.

CROSSBOW CONSIDERATIONS



- Bow needs to be cocked from the ground
- Proper shoes should be worn
- Cocking stirrup should be past ball of foot
- Avoid boots that are too big to fit inside cocking stirrup
- Avoid footwear with little or slick treads

Crossbows can be dangerous while cocking if not following some basic safety protocol listed above.

Proper Footwear



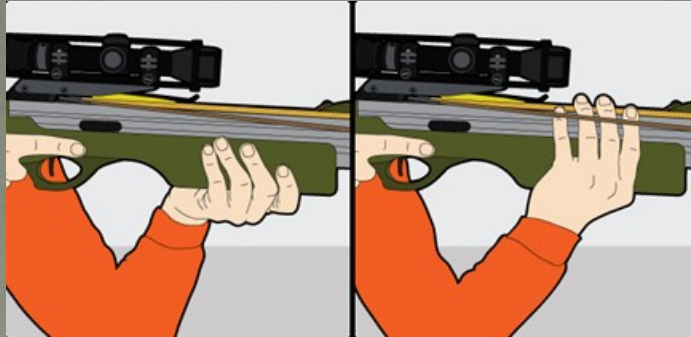
Proper footwear must be worn.

Avoid footwear with worn or slippery soles.

Be sure footwear fits inside of cocking stirrup.

Hand Placement

Fingers in correct spot, you'll make your shot

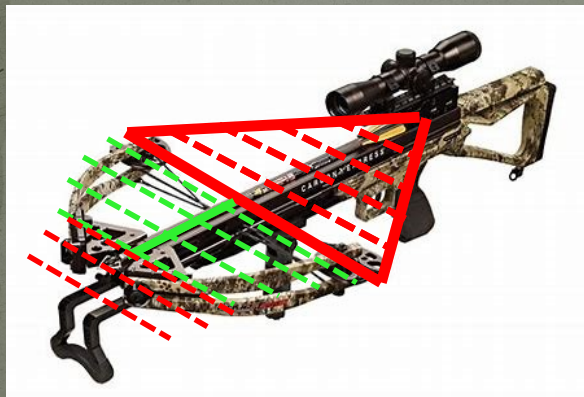


Fingers above rail – you may fail

Need to keep thumb and fingers below rail while shooting.

Most crossbows are designed where it is difficult to get thumb or fingers up above the rail, but can still happen when your adrenaline is flowing while aiming at a deer.

The Three Sided Threat

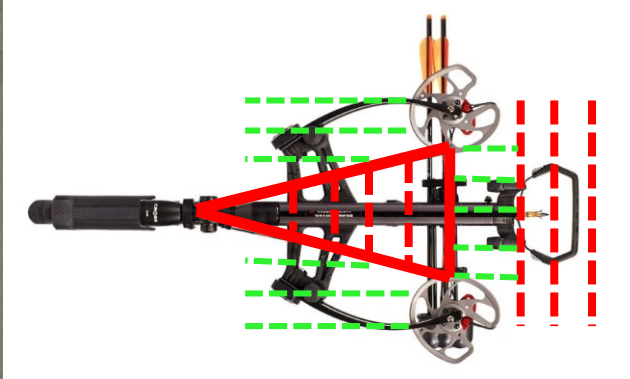


- At no time should your hands or fingers be inside this triangle while bow is cocked.
- While loading arrow be sure your fingers are behind the arrow point / broadhead but in front of the triangle
- Where is your hand while the bow is rested on your lap in treestand

Hand must be outside of the triangle of doom.

When loading an arrow, be sure your hand is in front of this triangle with your hand behind the point of the arrow.

The Three Sided Threat – Reversed Limb



- At no time should you hands or fingers be inside this triangle while bow is cocked.
- While loading arrow be sure your fingers are behind the arrow point / broadhead but in front of the triangle
- Where is your hand while the bow is rested on your lap in treestand

Same as traditional crossbow – just the triangle of doom is smaller

Check Eye Relief from
Scope



- Be Sure You Have
Plenty of Horizontal
Limb Clearance

- A crossbow still has some recoil. Be sure you have at least an inch eye relief before squeezing the trigger.
- Be sure you have at least 6"-8" of clearance between the limbs of your crossbow and the tree or other obstacles.
- If the limb of your crossbow comes in contact with the tree when shooting, a lot of damage can happen to you and the bow.
- May limit you to shots only in front of you.

- Must Shoot at End of Day
- Bow Needs to be Un-cocked When in Transport



Most manufactures recommend the bow be shot to un-cock it at the end of the hunt.

One can use a small block target, a crossbow de-cocking arrow or a field point into the ground if your are hunting in areas with soft sandy soil.

Law allows you to carry one arrow other than a broadhead for the purpose of uncocking your bow.

There is not a state law that says your bow needs to be cased while in transport, but a law that states bow needs to be un-cocked while in transport.

Delaware Water Gap has a special regulation that all bows need to be cased while in transport.



Summary

For every advantage of a crossbow there is a disadvantage. Other states with crossbow seasons have shown that success rates between crossbows and vertical bows are about the same. Accidents rates are also about the same. Therefore, crossbows are more of a personal preference.

What crossbows do is allow for students to get into the sport at a younger age and allows archers to remain in the sport later in life. More archers = strength in numbers