

Adaptive Equipment for the Aging or Physically Challenged Bowhunter

**Provided as a courtesy of the
North American Bowhunting Coalition**

With special thanks to:

New York Bowhunters, Inc.

Montana Bowhunters Association

North American Bowhunting Coalition

The North American Bowhunting Coalition (NABC) was officially formed during a conference of state and provincial-level bowhunting organizations which was held at the Pope & Young Club's headquarters in Chatfield, Minnesota on August 6th & 7th, 2005.

Attended by 41 representatives of 33 organizations in 29 states and Canadian provinces, attendees addressed issues of greatest concern to the future of bowhunting.

North American Bowhunting Coalition

During the conference a program to assist the aging and physically challenged archer was launched. Attendees agreed that although Physically Challenged bowhunting programs were available in states such as New York and Montana, more work was required to educate bowhunting organizations, game departments, archery shop owners and the general public about the adaptive equipment currently available that can be used with conventional bows.

North American Bowhunting Coalition

Because the members of the NABC recognized the importance of assisting the physically challenged and the elderly, the NABC Physically Challenged Committee was formed in 2005 with two primary goals:

- Educate the general public, archery manufacturers and game departments about available adaptive equipment.
- Educate bowhunting organizations so that they may better assist PC hunters with equipment selection and use.

North American Bowhunting Coalition

The NABC is sensitive to the needs of the physically challenged and aging bowhunter, as well as women and youth archers. This presentation was created as a tool to assist any of these individuals.

We hope this presentation is used as a resource for organizations, businesses or individuals to use as a guide whenever assisting our fellow bowhunters.

Physically Challenged Hunters

The words “Physically Challenged” covers a broad range of individuals which can include:

- The blind
- Wheelchair bound
- Amputees
- People with limited mobility
- And many others



Making final adjustments to this hunter's legal adapted gear

Physically Challenged Hunting

Contrary to what some manufacturers of crossbows want the public to believe, many physically challenged and elderly bowhunters use modified archery equipment to successfully take big game without the use of a crossbow.

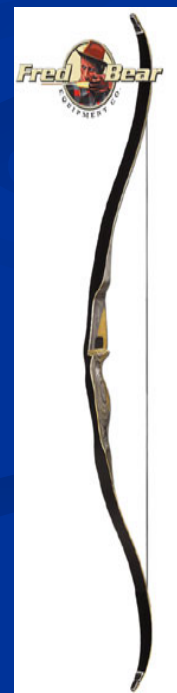
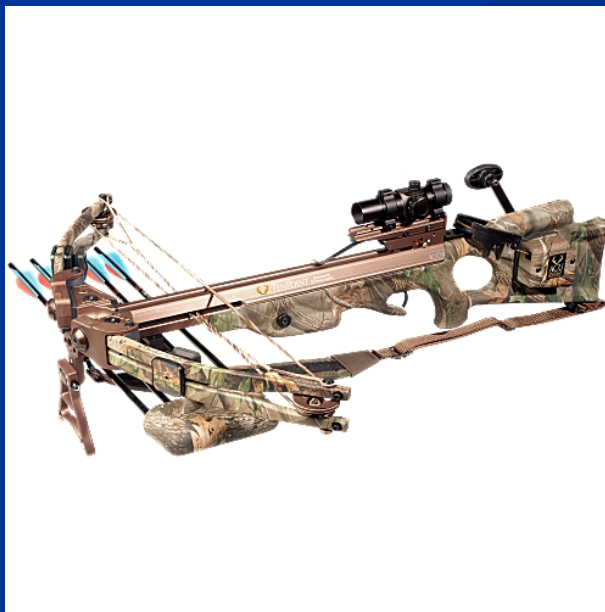


Physically challenged hunter practicing
at the archery range

Crossbow Controversy

There has been an intense effort by crossbow manufacturers to use individuals with disabilities as a tool to promote crossbow use during the archery-only seasons.

The majority of bowhunters are skeptical of these manufacturers ploys.



Crossbow Controversy

The NABC is sensitive to the needs of the physically challenged and aging bowhunter. In a press release from the April 17th & 18th, 2005 National Bowhunting Summit it states in part,

“The organizational representatives at the Bowhunting Summit were unanimous in their opposition to crossbows being allowed in bow seasons. The position taken is that crossbows are not bows and therefore they should not be allowed in bowhunting only seasons, except where the states already have exemptions for qualified physical disabilities”.

Crossbow Controversy

The NABC understands that present laws/regulations are in place in some states that allow disabled archers the use of crossbows in archery seasons. In this presentation we are suggesting available alternatives to assist disabled archers so they may hunt with modern conventional bows, adapted to their particular disability.

Modified Bowhunting Permits

In some areas, a modified archers permit may be required in order to adapt a conventional bow for hunting. This permit allows qualified individuals to hunt with a bow equipped with a wide variety of available adaptive devices. In other areas, a modified crossbow permit may be required in order for qualified individuals to hunt with a crossbow .

Modified Archers Permit

- Bowhunting organizations have worked with their game departments to help create Modified Archers Permits and Modified Crossbow Permits in an effort to assist physically challenged and elderly bowhunters within their state or province.

Modified Archers Permit

- For example, according to the New York State Department of Environmental Conservation (NYSDEC) website, a Modified Archers Permit allows qualified people to hunt big or small game with a legal bow that is equipped with a device to hold it in a drawn and cocked position. This permit does not allow the use of a crossbow.

Modified Archers Permit

According to the Montana Fish, Wildlife and Parks Commission, a Permit to Modify Archery Equipment (PTMAE) reads as:

Residents and non-residents certified as permanently and substantially disabled, as defined by FWP rules, may apply for a PTMAE. The PTMAE allows a person with a disability to use archery tackle that supports the bow, and draws, holds, and releases the string to accommodate the individual disability. Arrows are not exempt, and must meet requirements for the archery only season. This permit does not entitle the holder to use a crossbow. The permit only allows modification of legal archery tackle and must be used with a valid bow and arrow license and appropriate hunting license.

Modified Crossbow Permit

- According to the NYSDEC website “a Modified Crossbow Permit allows qualified people to hunt big or small game with a crossbow that has been specifically modified with a device that only allows it to be discharged (fired) by means of a breath tube. This permit does not allow the use of an unmodified crossbow.”

Modified Bowhunting Permits

- Other states and Canadian provinces may have differing permits available. Please contact your game dept. to investigate whether such a permit is required in your area. Please contact the NABC at the address listed at the end of this show if you would like assistance with starting a Modified Archers Permit Program in your state or province.

Adaptive Equipment - Where To Start

Depending on the hunter's physical limitations, an adjustment in gear (new bow) may be all that is required. This is becoming more important as baby boomers begin to age gracefully into their elderly years.

Adaptive Equipment - Where To Start

It is also important after having major surgery to areas such as the back, shoulder, elbow or wrist. Many times archers may need to modify their equipment for a short period of time, say 1 hunting season. In many cases, the archer is back to his/her old shooting form the following year.

NOTE : Many of the following recommendations can be applied when setting up a youth or woman bowhunter.

Changing Equipment

With today's high let-off bows, some with as much as 85%, a person pulling 35 pounds is only holding 5 lbs. at full draw. This can make a huge difference to the physically challenged, aging, youth or woman archer.

Most states and provinces have a minimum requirement for the poundage of a legal hunting bow. Please investigate what the minimum bow requirements are for your area.

Choosing The Right Bow

When selecting a new bow for a physically challenged, youth, woman or aging bowhunter keep a few basic things in mind, they are:

- Choose a light weight bow in the 2.5-3.5 lb. range.
- Choose bows which have round wheels or soft cams.
- Choose a bow with a “Deflexed” riser.
- When possible, choose a bow with a 36” or more axle to axle length.
- Choose a bow in the 35 – 50 lb. draw weight range.
- Choose a bow with a high let-off, over 75%.
- Start practicing with the poundage set low.
- Limit practice to no more than every other day.

Choosing The Right Bow

Many times, a bow designed for a youth or woman archer can be modified for use with an aging or physically challenged male bowhunter. For example, a youth bow with a peak weight of 50 lbs and a draw length of 28" can be modified to fit an archer with a 30" draw length.

Choosing The Right Bow

One way of doing so is to add a string loop or Ultra Nock to the archers bow. This will add 1'' of draw length. If the archer can use a mechanical release, this will typically add another 1'' of draw length. When combined together, the archers longer draw length can be achieved.

Choosing The Right Bow

This concept can be applied to any bow with any draw weight or length. After muscles are strengthened, the archer may be able to return to using an unmodified bow.

Choosing The Right Bow

Hunters Friend, has an exceptional tool for assisting anyone in the selection of a new bow. Their website <http://www.huntersfriend.com/> has a compound bow selection guide which can be used to make side by side comparisons of the specifications of all available compound bows on the market for that calendar year. For example, when searching for a lightweight bow for an aging or disabled hunter, this website can save hours of research time and is a good starting point for the beginning of any bow research.

Choosing The Right Bow

Once in the Hunters Friend Website, look at the left side column and select “Bow Specs Comparison”. Click on this and once the screen changes select, “View all Bow Data” or feel free to select any of the other categories such as “Sort By Forgiveness” etc.

Adaptive Equipment

For the hunter who cannot hunt by changing to a new or more forgiving bow, many adaptive devices are available to assist them in participating in archery. Some of these devices are shown as follows:



Adaptive Equipment

Hunting Blinds

Some hunters have lost the ability to get into tree stands. Many hunters have taken to the ground using pop up blinds. The blind allows the hunter to stay concealed and out of the weather.

Just a few of many sources:

<http://www.ameristep.com>

<http://www.doublebullarchery.com>



Adaptive Equipment

Timberlift

Physically challenged hunters who find it difficult or even impossible to climb in a tree stand can use the **Timberlift**. It has a quiet electric motor and rechargeable battery. Information is available at:

<http://www.timberlift.com/>



Adaptive Equipment

Draw Assisting Devices

The **Pullin Archery** device assists the physically challenged archer with his or her bow set-up.

The device can be used for any number of physical disabilities.



Adaptive Equipment

The device assists the hunter in drawing the bow and holding it back at fulldraw. Pullin Archery Products, Inc can be reached at P.O. Box 78, McDowell, VA 24458. Phone/Fax 540-885-1250.



Adaptive Equipment

Draw Assisting Devices

The **Bow Pro** is similar to the Pullin Archery device. Like most adaptive equipment, the **Bow Pro** attaches to the bow at the burger button hole. Special mounting plates allow mounting of the **Bow Pro** without any modification to the bow handle.

The **Bow Pro** draw bar and draw tube force the archer to pull the bow back to the same place. It also keeps the archer from twisting the bow handle or pulling the string off center.



Adaptive Equipment

There is also a stop screw at the end of the draw bar that anchors the archer at the same draw length. This provides the disabled archer with consistent arrow flight out of the bow.

Once the **Bow Pro** is set up and tuned on the bow, an archer only needs to pull, aim and shoot. All **Bow Pro** kits come complete with the mounting plate, draw tube, draw bar / release, snap-it arrow rest, overdraw guard and mounting bolt.



Bow Pro Close Up



Adaptive Equipment

The **Bow Pro** Release System is available in two models. Non-locking & Locking. The non-locking system does not aid in holding the bow at full draw, while the Locking System does lock the bow at the full draw position.

The **Bow Pro** is available from:

Bow-Pro Archery Equipment

22686 Gratiot Rd

Merrill, MI 48637

989-643-5828

www.bow-pro-archery.com

Email : bowpro409@aol.com



Adaptive Equipment

Draw Assisting Devices

The **Draw-Loc** is similar to both the Pullin Archery device and the Bow Pro. Commercials for the **Draw-Loc** on satellite TV, state that a 7 year old child can load, draw and shoot a 70# compound bow fitted with a **Draw-Loc** device.



Adaptive Equipment

Draw Assisting Devices

The intended use of the Draw-Loc, Pullin Archery device and the Bow Pro are all the same. Each device allows a hunter to pre-draw the bow, locking the arrow into a holding position . Typically, a stirrup is added to the bow's stabilizer port. This allows a hunter to place their foot into the stirrup while drawing the bow back into the locked position. Once locked into position, the archer only needs to aim and release the devices trigger mechanism.

Adaptive Equipment

Draw-Loc sells a foot stirrup as shown at the right.

Draw-Loc can be reached at 228-832-2619.



Close Up of a Stirrup



Adaptive Equipment

Hold Assisting Devices

The **Steady Freddy** allows the archer to draw back a bow on their own and redistributes the bow's physical weight onto the archer's hip. This can help hunters with wrist, elbow and shoulder injuries.



Adaptive Equipment

The **Steady Freddy** is available from G. R. Reichert at 331 Chestnut Ridge Lane, Harrisburg PA 17112.

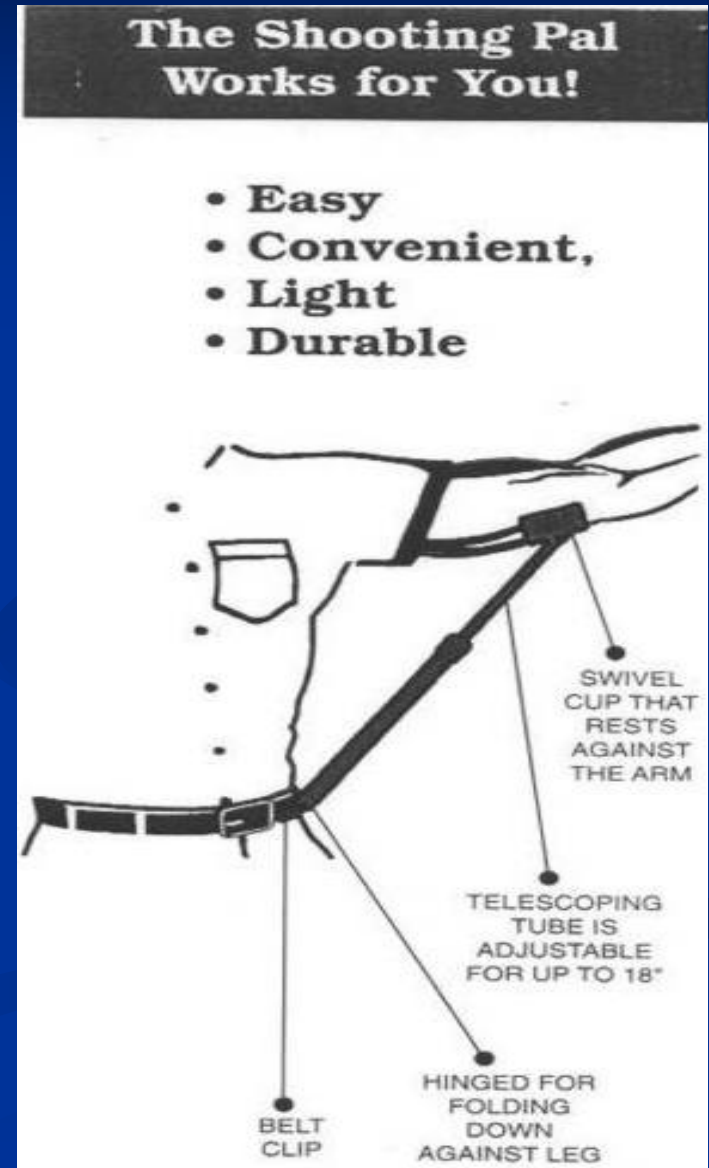
The device is also available in some catalog stores and may go by a similar name.



Adaptive Equipment

Hold Assisting Devices

The **Shooting Pal** adds accuracy for any bow hunter or archery target shooting. It gives you an aimed rest that steadies your shot and allows for better distance shooting. Contact Pal Development at (616)-248-1163



Adaptive Equipment

Hold Assisting Devices

The **Arm-A-Rod System** is similar to the Steady Freddy and Shooting Pal and is available from:

Lone Star Field Products
537 Easy Street
Garland, TX 75042

Phone: 972-276-3110

<http://www.lonestarfieldproducts.com>



Adaptive Equipment

Blind Archers

There have been instances of sighted archers not taking game animals when sighted, but doing so after being blinded and utilizing adaptive equipment.



Adaptive Equipment

Blind Archer Set-up

The archer has a hunting companion know as a “spotter” who:

- Sights for them.
- Makes commands for adjusting the archer’s hold.
- Provides a signal for release.



Adaptive Equipment

Blind Archer Set-up

In this particular blind archer set-up, we have a 1" tube of aircraft aluminum that has been mounted to the bow. Rifle style sights have been attached to the tube. The new style fiber optic sites also work well for this purpose.



Adaptive Equipment

Blind Archer Set-up

After mounting the 1" tube and sites, a sighted companion looks over the shoulder of the archer when at fulldraw and assist them in aiming by voice and touch commands. The sites can be adjusted for windage and elevation. As with all bowhunting, practice is extremely important.



Sites for the Sightless

SITES FOR SIGHTLESS

by

James Meacham

The site for a blind shooter consist of 5 parts. The first is the site, the second is the site mounting bracket, the third is the peep stem, the fourth is the peep and the fifth is the spotter.

1. Spotter

In order for a right-handed blind person to shoot their bow they need a person to spot for them. This spotter stands behind the shooter and directs him toward the target by physically moving him.

The shooter draws his bow and the spotter places his chin on the shooter's right elbow, the spotter then looks down the sight to the target, grabs the shooter left arm with his left hand, and grabs the shooter's right bicep with his right. The spotter swings, raises, lowers, and cants, the shooter's bow arm and with his left hand. With his right, the spotter guides and steadies the shooter's drawing arm. When the shooter is on the target and is ready to shoot, the spotter says "Chhh," which lets the shooter he can release. Any other sound could be confused with a verbal command and the shooter could release when the spotter wasn't ready.

2. Site

Since the spotter can not aim the shooter by looking down the arrow the site must be on the opposite side. Now the site is a normal site. The only difference is most sites come setup for a right handed shooter. Therefore you must convert the site from being a right to a left handed site. That is if you are a right handed shooter.

3. Site Bracket

The site bracket will come with your site but, 2 additional holes are drilled in to it, in order to attach the peep stem. These 2 holes are centered in the dovetail slot. You may find it easier to drill the holes in the site bracket and in the peep stem together.

4. Peep Stem

The peep stem is a flat bar a 1/2 inch wide and 8 inches long with a 45 degree bend to move the peep farther out. There are 3 holes. Two are for attaching the stem to the site bracket. The third is located at the opposite end. This is where the peep is attached.

5. Peep

The peep is an 1 and 1/2 inch ring with a hole to attach it to the peep stem. There are 3 wires originating at 10, 2, and 6 o'clock making a Y inside the circle.

Now bolt the peep to the peep stem. Mount the site bracket to the bow. Bolt the peep stem to the site bracket and insert the site into the dovetail slot. Now you and your spotter are ready to site in your bow.

Sites for the Sightless

The **Peep Eliminator** can be used with existing bow sites in order for the spotter to assist the archer in aiming. Please contact:

Melvin Deien
1004 S. Walnut Road
Breese, IL 62230
Phone 618-526-4427



Visually Impaired

Blind Archer-Visually Impaired

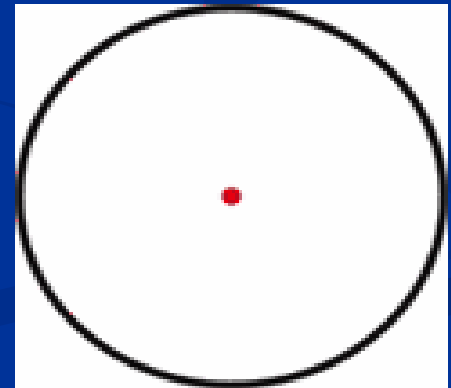
Red Dot Scope.

With this sight there is no peep sight required. Once the bow has been sighted in, simply put the red dot in the center of scope on your target. Blind archers as well as the visually impaired will benefit from this device.

<http://www.buckpole.com>



Mounted On Bow



Sight Picture

Adaptive Equipment

Wheel Chair Set-up

A key component in the wheelchair set-up is the bow support. A bow support allows the bow to:

- Be held in front of the archer.
- Distribute its weight to the chair.
- Be attached to the chair.





Adaptive Equipment

Bow Support

These are made of rectangular aluminum tubing. The support is held in place with a custom plate designed for each wheelchair.

Available by special order from:

LZR Creations

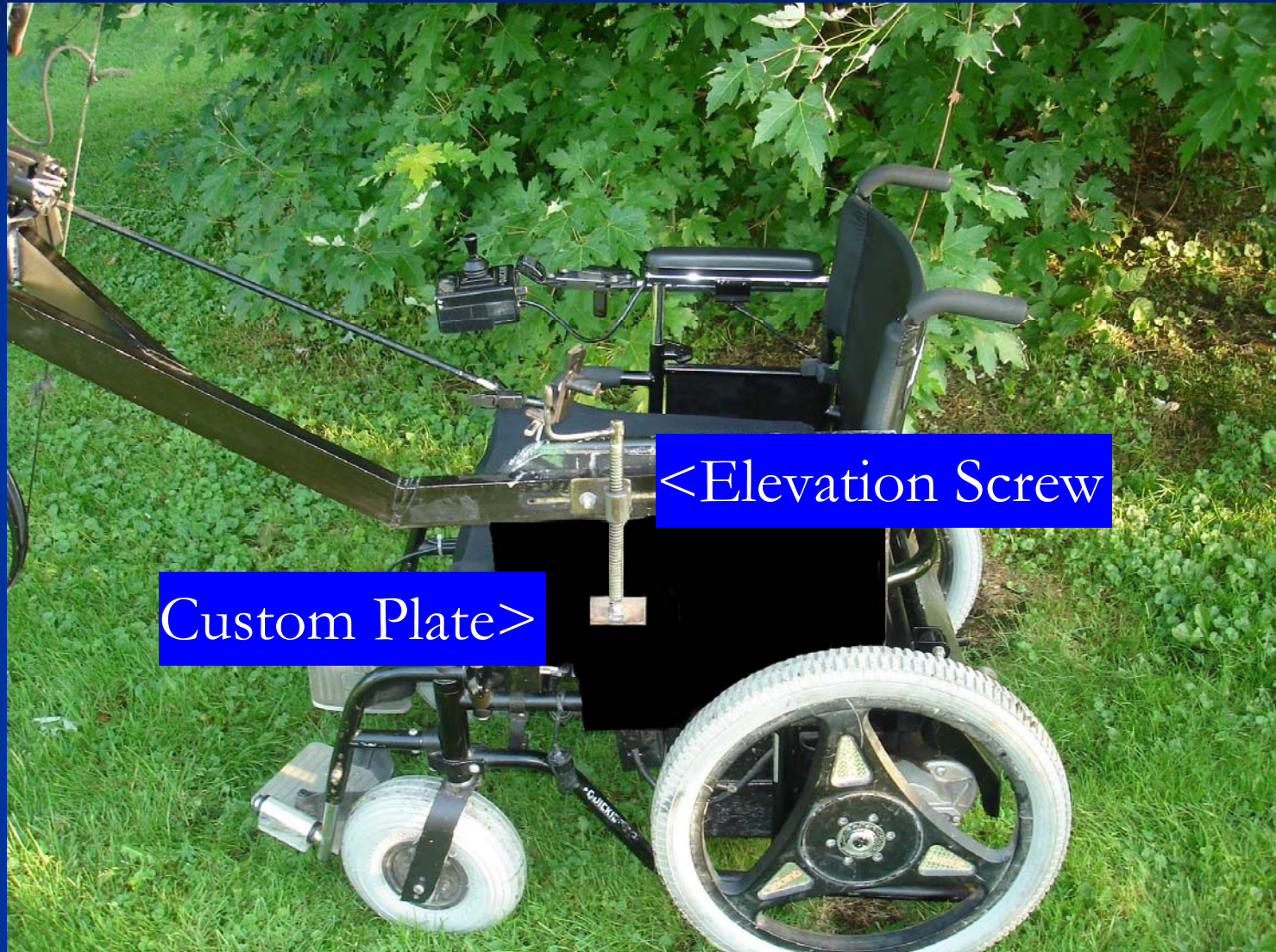
Contact: George Bolender

(315) 524-3967

bowman59@rochester.rr.com



Close Up of a Bow Support



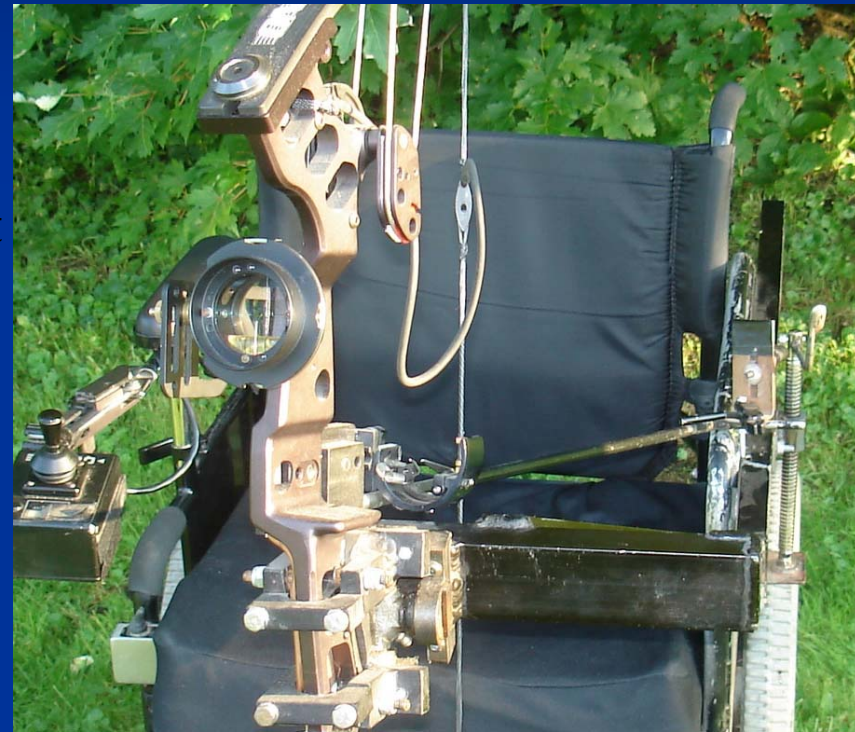
Adaptive Equipment

Wheel Chair Set-up

In a wheel chair set-up, the bow is drawn by the hunter's companion. Utilizing additional adaptive equipment the bow string will remain locked in the release position until a shot is taken or the bow is let down.

The hunter will be able to position the bow and take a shot on their own.

The amount of bow movement depends on the hunter's level of disability.





25 Yard Group



George Bolender from NY with his bow rig and 25 yard group



George Bolender hunting in late fall.

Adaptive Equipment

Release for Single-handed Shooters.

Some hunters missing a hand are in good physical condition and can shoot a modern compound bow with little or no assistance.



Adaptive Equipment

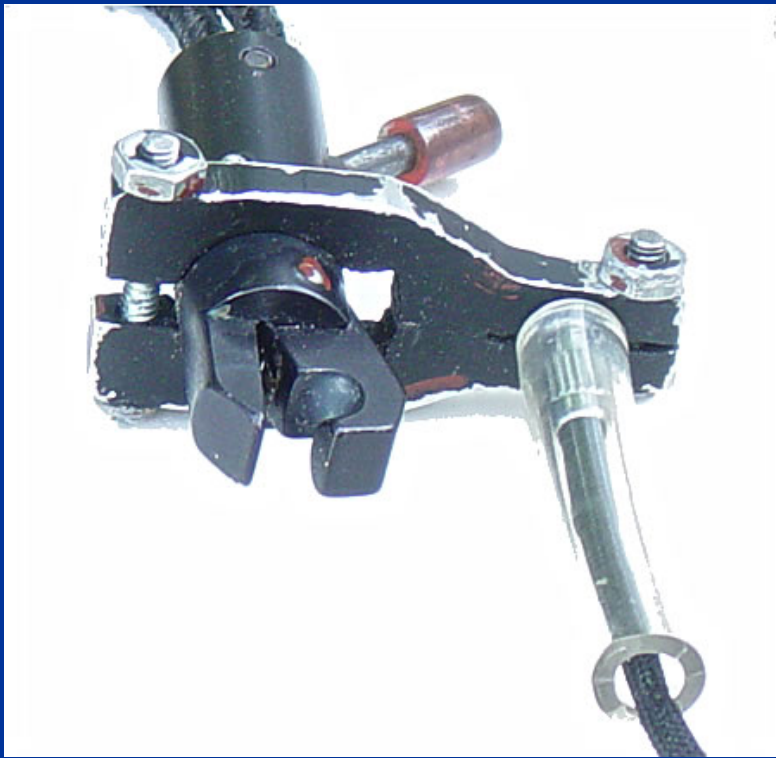
Release for Single-handed Shooters.

A modified release allows them to continue bowhunting. Many are better shooters than hunters with two hands.



Adaptive Equipment

Close up - Release for Single-handed Shooters.



Adaptive Equipment

Release for Single-handed Shooters.

One such release is available from:

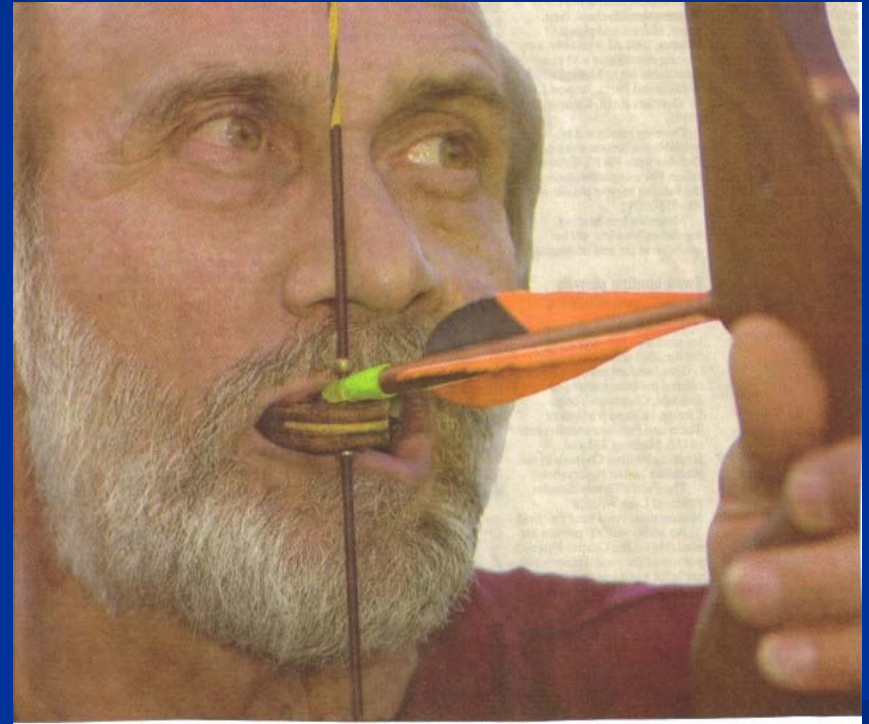
<http://www.brandonfla.com/archery/>



Adaptive Equipment

Mouth Tabs

Many physically challenged hunters that are missing limbs have adapted their drawing technique to include the use of a mouth tab.



Adaptive Equipment

Mouth tabs are hard pieces of leather that are permanently attached to the bow string. A bowhunter bites down on the tab, pushes the nocked arrow away from the body coming to full draw. They then aim and open their mouth in order to loose the arrow.



How to Build a Mouth Tab

- A mouth tab should be made of saddle leather, as it is thicker than most other leathers. This thickness is important, especially when shooting heavier weight bows, as it prevents a shooter's teeth from slamming together upon releasing the string. Start off with two slabs of leather and put a piece of plastic in the front half, center portion of the two pieces. This reinforces the leather and prevents it from tearing out, and it also provides consistency in shooting.

How to Build a Mouth Tab

- Sew the two portions of leather around the plastic insert (or use a bonding substance if preferred) and drill a hole near the front of the mouth tab. After the hole is drilled, run the bow string through the hole using a paper clip and pliers to pull it through.

How to Build a Mouth Tab

- The arrow nocking point will likely be higher than normal so shooters must experiment a bit. Use two string nocks to hold the tab in place, one below the mouth tab and the other above it. Leave enough space for the arrow to be nocked on the string just below the upper string nock. See close up photo of mouth tab.

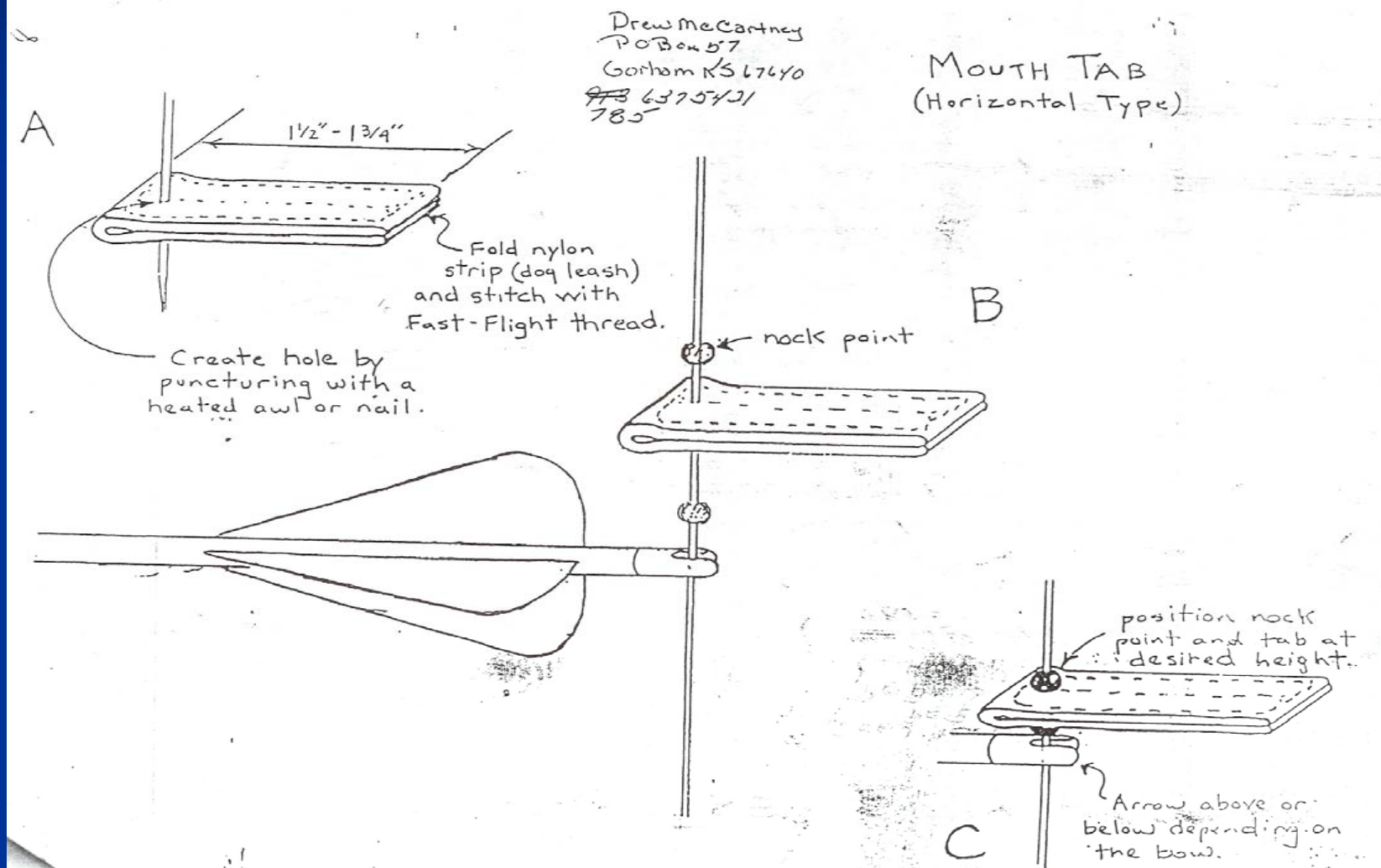
Close up of a Mouth Tab



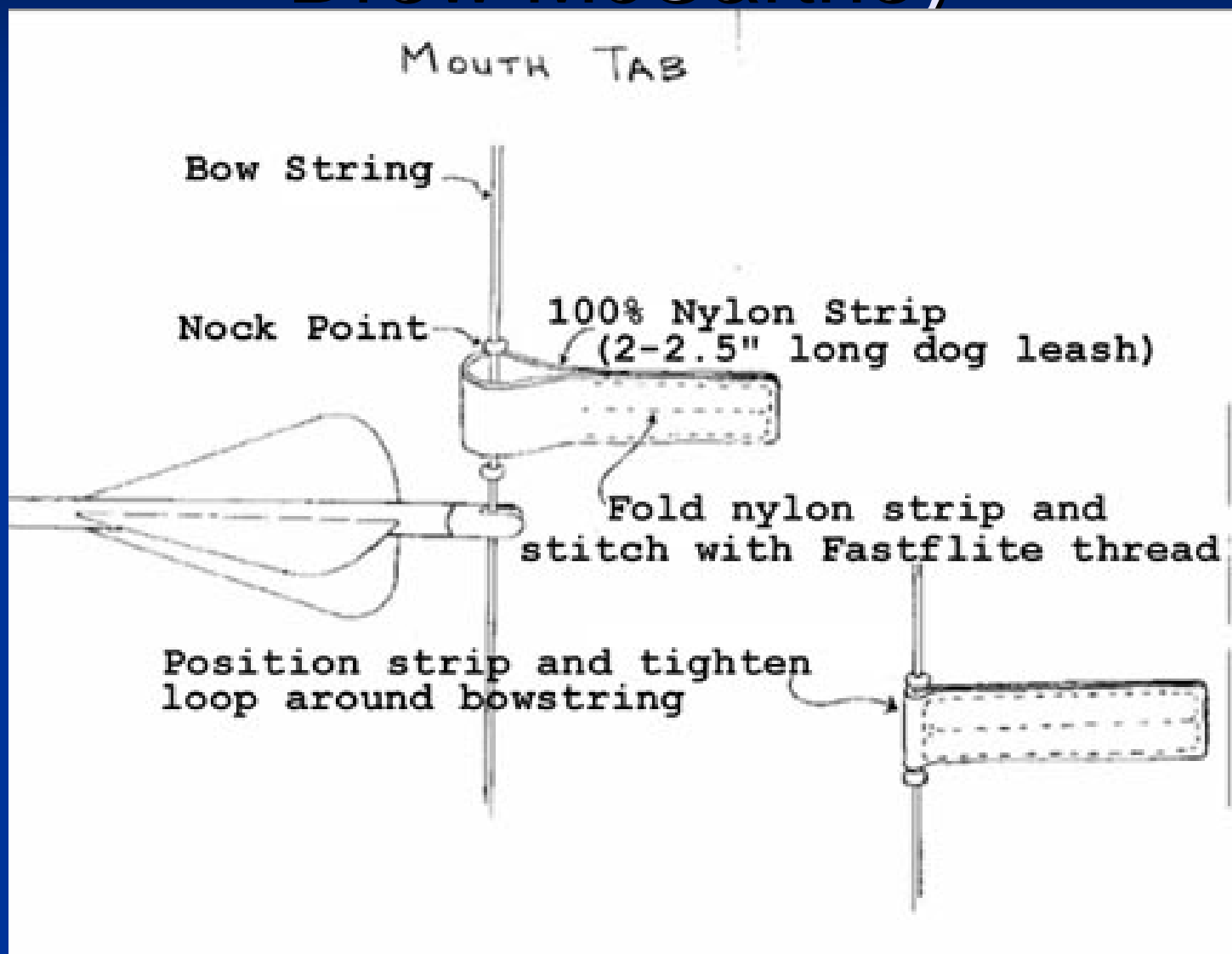
How to Build a Mouth Tab

- Lastly, it is desirable to imprint your teeth on the leather which will result in having a consistent place to bite the tab. To do this, soften the leather with water and bite down at intermittent intervals for about an hour which will produce the permanent teeth imprints required for consistent shooting.

Mouth Tab Diagrams

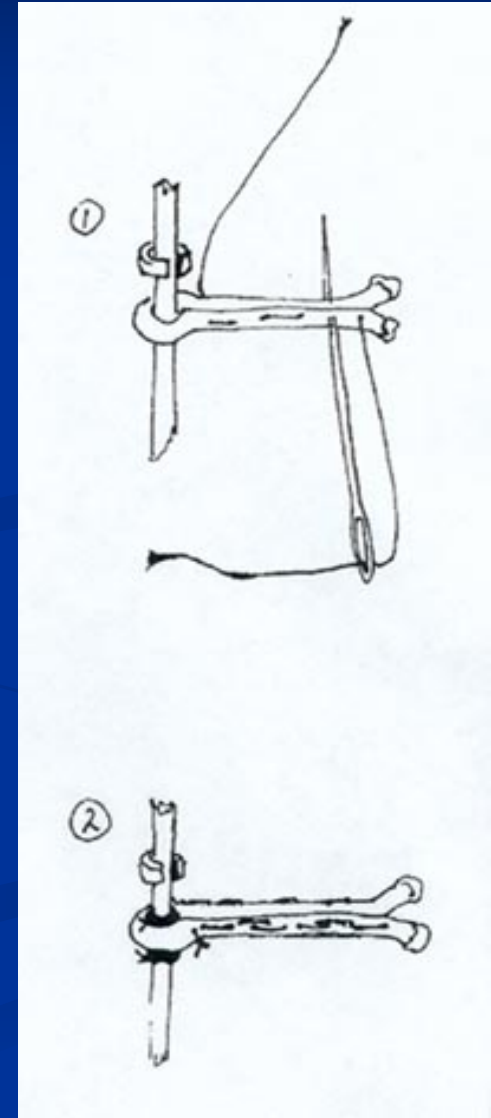


Mouth Tab Diagram By Drew McCartney



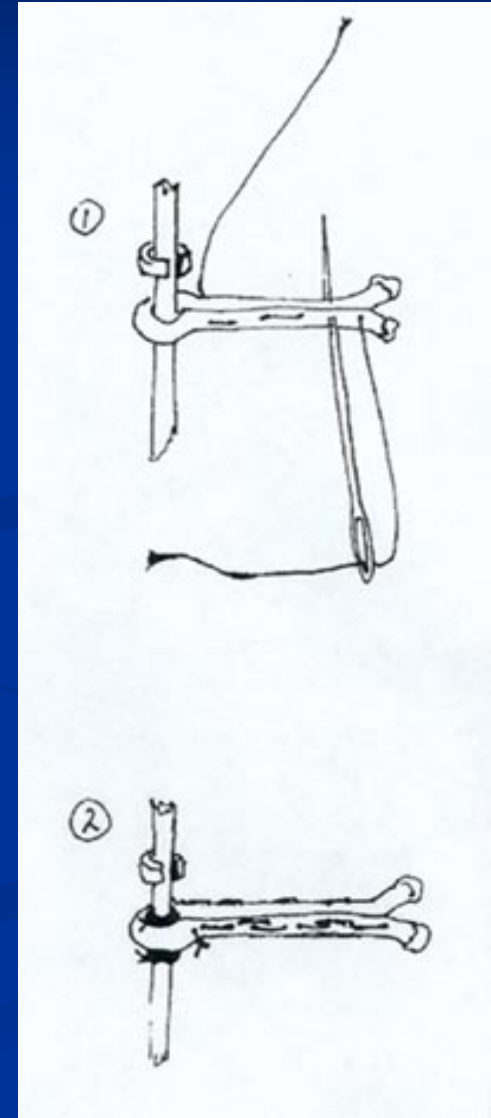
Making of a Mouth Tab By Bard Prentiss for the PCBA

- 1) Cut off approximately 3" of 1/8" dacron line and finish by burning both ends.
- 2) Fold line evenly around Bowstring, just below the nock set. Beginning at the bowstring end, using Fastlite and a heavy sewing needle, stitch the two halves of the tab together to within 1/4" of the end. Be sure to leave several inches of Fastlite at the beginning for securing later. Drawing #1



Making of a Mouth Tab By Bard Prentiss for the PCBA

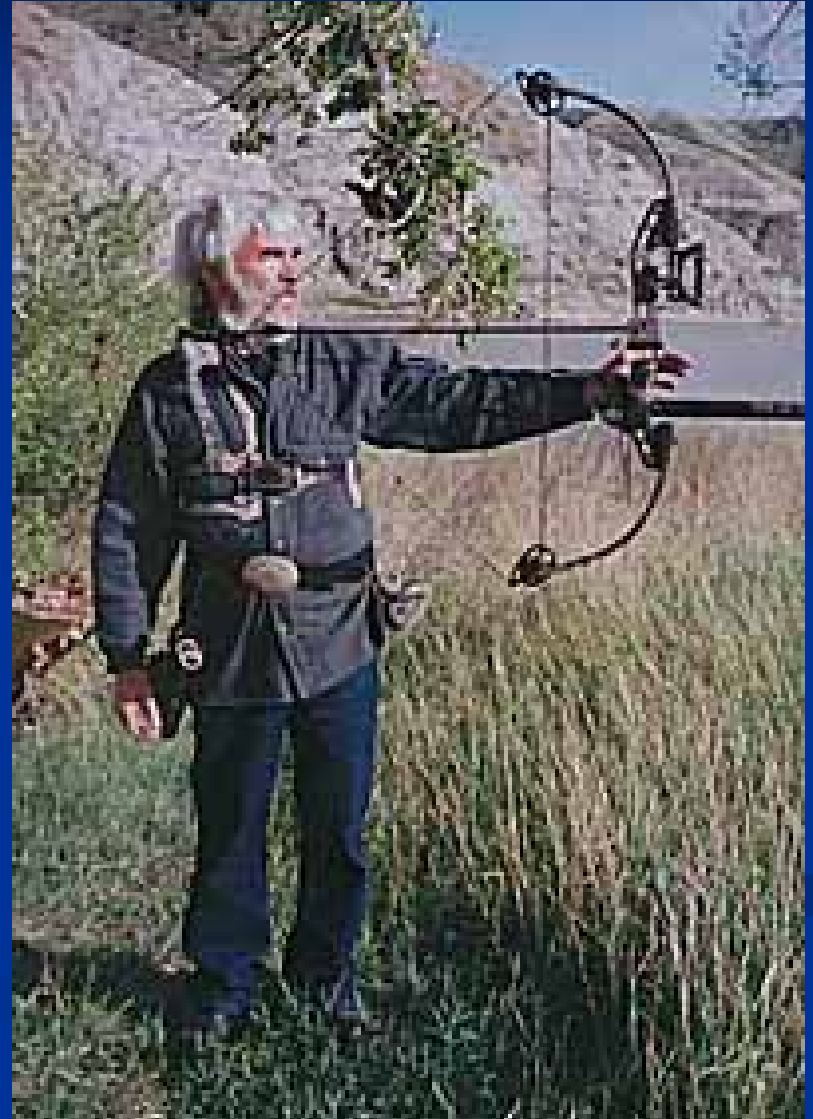
- 3) Continue stitching back to the bowstring, ending at the opposite side where you started. Pull the two ends of the Fastflite as tight as possible and secure with 3-4" square knots. Cut off the excess Fastflite and finish the knot by burning the ends. Your tab should closely resemble Drawing #2. All that is left is to serve small knots above and below the tab to keep it in place on the string. Keep the ends of the tab spread in the form of a Y for a solid, 2 molar, grip. Your new tab should last for many thousands of shots.



Bow Brace

T/Wright Bow Brace

For amputees or bowhunters with weak arm strength who do not want to use a mouth tab, there is the T/Wright Bow Brace. The T/Wright Bow Brace allows one-armed archery. The bowstring is drawn back by a jaw system attached to the shoulder of the brace and the arrow is fired by a chin release system.



Bow Brace

The T/Wright Bow Brace is
available from:

T/Wright Bow Brace
Tom E. Wright,
P.O. Box 1541
Lethbridge, Alberta, Canada
T1J 4K3

403-381-6605 (summer)

403-328-5215 (winter)

Adaptive Equipment

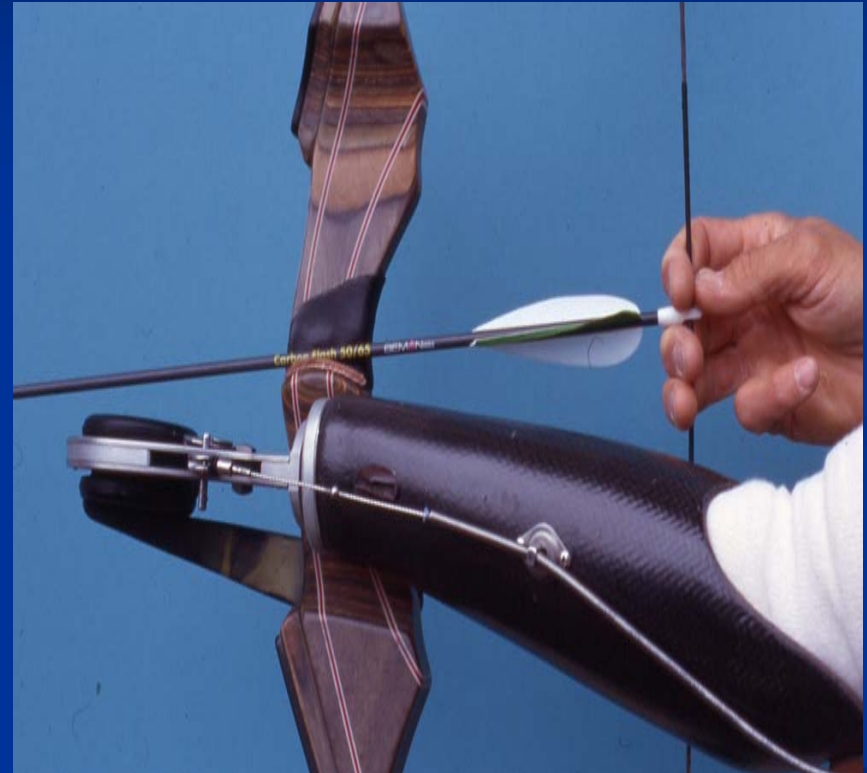
Traditional Archers

Many modern archers continue to hunt with adaptive equipment and modified compound bows but how about a Traditional Archer? Can they continue to hunt too?



Traditional Bowhunters

Of course they can. Don't think that all physically challenged bowhunters hunt with modern gear. This photo is of a modified recurve bow



Traditional Bowhunters

At right is a photo of Jim Onderko. Jim is just one example of "where there's a will, there's a way" in order to hunt with standard bowhunting equipment. Jim lost his right arm at the shoulder in an industrial accident several years ago and also incurred several other permanent injuries due to the accident.



Traditional Bowhunters

Jim moved to Montana from PA several years ago after his accident, in large part due to the crossbow situation in the neighboring state of OH where he often hunted.

Jim traveled around Montana helping to promote the MT Bowhunters Association's Modified Archers Equipment. Jim shoots with a mouth tab and has taken lots of big game animals in addition to the fine elk in this photo.



Traditional Bowhunters

With a little time and ingenuity, almost all challenges can be overcome with some forethought and a little direction.

The NABC's Physically Challenged Committee is here to provide that direction.



Physically Challenged Hunters

Physically Challenged Archers can get back into the sport of bowhunting.

Many hunters get together for annual events . The photo depicted at right is of the New York Bowhunters 2005 annual PC hunt. This event has been held for over a decade and grows more successful each year.



When Hunting with the Physically Challenged

Items to consider:

- With severe disabilities, hunt on land with facilities close by to accommodate the bowhunters and their physical condition.
- Hunt early in the season to take advantage of warmer weather
- Encourage hunters to harvest female deer (does).
- Have a shooting range available.
- Have plenty of able bodied help.
- Use radios for communication.
- Use comfortable blinds for easy hunter access.
- Choose easily assessable areas for blinds.
- Be patient.

Physically Challenged Hunting

An informative video tape titled "ARCHERY: THE SPIRIT IS ALIVE" may be obtained from: The US Archer, 7315 N San Anna Drive, Tucson, AZ 85704 for a nominal fee.

The video highlights devices that are available to the physical challenged hunter and can be used in conjunction with this presentation.

Additional Sources of Information

Additional sources on physically challenged hunting are:

- New York Bowhunters, Inc. at
www.newyorkbowhunters.com
email: bowman59@rochester.rr.com
PH. (315) 696-6365
- Physically Challenged Bowhunters of America at
<http://www.pcba-inc.org/>
PH. (724) 668-7439

Physically Challenged Hunters

By utilizing adaptive equipment and good old American ingenuity, the vast majority of all physically challenged and elderly bowhunters can be in the woods this fall without the use of a crossbow. The NABC understands that each physically challenged hunter's needs are different and that circumstances may arise where hunters would need to use devices not depicted in this presentation.

The NABC supports the rights of all hunters to be in the woods bowhunting this fall.



“Little John” DiMura from NY

North American Bowhunting Coalition

THE END

Please contact the NABC with any questions you may have regarding adaptive equipment or for additional copies of this presentation. We can be reached at :

North American Bowhunting Coalition, P.O. Box 493, Chatfield, MN 55923